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PSYCHOLOGICAL DIFFERENTIATION AS A FACTOR IN MARITAL PROBLEM SOLVING

by

©

LANDOR LIDDELL

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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Date October 5, 1984

ABSTRACT

The purpose of this study was to examine the relationship between psychological differentiation and marital problem solving. Psychological differentiation is an individual differences concept measured by tests of the cognitive style dimension field dependence/independence (Witkin, Dyk, Faterson, Goodenough, & Karp, 1974). Compared to those who are field independent, field dependent persons experience less self - nonself segregation and subsequently depend more on the external field as a referent for behaviour.

Marital problem solving, unlike individual problem solving, is primarily an interaction experience. It is a context in which both problem structuring and social sensitivity skills are required. Psychological differentiation encompasses both of these skills. Klein and Hill's (1979) theoretical framework of marital and family problem solving effectiveness was utilized to examine the relationship between psychological differentiation and three main aspects of the marital problem solving framework. Since this study was considered to be theoretical and exploratory, a small number of participants was included in the study.

The independent variable consisted of four combinations of the cognitive style field dependence/independence within four married couples: field dependent husband with field dependent wife, field independent husband with field independent wife, field independent husband with field dependent wife, and field dependent husband with field independent wife. Field dependence/independence was measured with the Group Embedded Figures Test (Witkin, Oltman, Raskin, & Karp, 1971). The dependent variable was inclusive of three areas pertaining to problem solving dynamics: (a) marital structural properties indicated by couple perception of marital cohesion and marital adaptability measured by FACES II (Olson, Portner, & Bell, 1982); (b) marital interaction indicated by the amount of interaction, the distribution of interaction, and the sequencing of interaction measured by the Marital Interaction Coding System III (Weiss & Summers, 1984); and (c) problem solving effectiveness as indicated by the couples' perception of their ability to solve problems and their satisfaction with their problem solving efforts (author designed self report measure).

Descriptive statistics were used to identify differences. The results indicated that couples mismatched according to cognitive style perceived themselves as more effective problem solvers than the couples who were matched. On most measures of interaction, both self report and objective, the field dependent husband and the field independent wife functioned more effectively than the other three couples. In addition to this finding, some couple differences were observed that were consistent with field dependent/independent cognitive style characteristics. After discussing certain methodological considerations including sample size, it was concluded that psychological differentiation in relation to marital problem solving should be studied utilizing a larger sample.

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CHAPTER I

INTRODUCTION

Personality characteristics are often acknowledged by social scientists as playing an important role in marital dynamics. Two research traditions as reviewed by Tharpe (1963) and Barry (1970) reflect the direction that personality and marriage studies have taken in previous years. The first tradition focused on personality and marital adjustment (Burchinal, Hawkes, & Gardner, 1957; Burgess & Cottrell, 1939; Tesman, 1938). The second tradition primarily dealt with the effects of complementary personality characteristics on marriage (Tharpe, 1963).

There has been some suggestion that since this second tradition, research on personality in relation to marriage has subsided (Doherty & Ryder, 1979). Subsequently, contemporary writers in the social science field have cited the need for a renewed interest in this area of research (e.g., Doherty, 1980; L'Abate, 1976).

In seeking to respond to this particular challenge, one is cautioned with respect to the need to work toward conceptual clarity in attempting to link individual personality factors and marital dynamics (Doherty, 1980). Klein (1983), for example, in his discussion of family problem solving, has stated that the properties of an individual family member are important as explanatory factors in family dynamics. He then goes on to make the point that a crucial question remains as to how to combine psychological properties in order to understand their predictable effect on the group.

The purpose of this study was primarily to respond to the concern of how the personality characteristics of the individuals in a marital dyad would relate to particular marital dynamics. Due to the scope of this study and its emphasis on theoretical concerns, it was designed as an exploratory study.

In order to pursue the above stated purpose, a particular theory of personality characteristics, psychological differentiation (Witkin, Dyk, Faterson, Goodenough, & Karp, 1974), has been considered in relation to marital problem solving dynamics. The integration of these two concepts has been undertaken using Klein and Hill's (1979) model of family problem solving effectiveness.

Psychological differentiation theory (Witkin et al., 1974) has been selected for this study primarily because of the potential it has for facilitating a link between the individual and marital levels of systems analysis. Such a link may be grounded within general systems theory (Bertalanffy, 1955). In addition, the body of literature relating to psychological differentiation has indicated that it has definite implications for an individual's problem solving style, particularly as it pertains to one's ability to structure or organize a problem in order to solve it, as well as one's interpersonal behaviour (Witkin et al., 1974). Problem structuring skills and social sensitivity skills pertaining to individuals operate at the marital level of analysis and lend themselves to a study of marital problem solving dynamics (Reiss, 1971a). A final value of utilizing psychological differentiation theory is that it can be operationalized with the cognitive construct field dependence/independence (Witkin, Goodenough, & Oltman, 1979). The cognitive personality construct has been utilized in recent marital studies (Doherty, 1980; Doherty & Ryder, 1979; Sabatelli, Dreyer, & Buck, 1983). The cognitive personality construct has been considered by some to be a more functional variable than the personality trait approach in that cognitive sets are believed to be used fairly consistently by individuals in a variety of settings (Endler & Magnusson, 1976; Mischel, 1968, 1973).

Marital problem solving, as previously mentioned, has been selected as a viable context within which to determine the effect of psychological differentiation on marital system dynamics. While choice of marital problem solving dynamics is related to a conceptual argument, it is a choice which has been based on practical considerations as well. By working with marital problem solving dynamics, it was possible to utilize Klein and Hill's (1979) model of the determinants of family problem solving effectiveness. This model, which is considered to be compatible with systems theory, has provided this study with operational clarity.

The objective, then, of this study was to describe the relationship between individual cognitive style characteristics combined within a marital dyad and couples' problem solving dynamics. It was proposed that the distribution of individual cognitive style differences or similarities within a marital dyad would relate to various selected determinants of marital problem solving effectiveness. I have referred to the various types of marital dyads determined by a combination of individual cognitive style and gender as the independent variable in this study; however, it should be noted that, in the strict sense, the term independent variable implies an experimental study, which this is not.

In summary then, this study examined the following problem: What is the relationship between individual personality characteristics combined in a dyadic relationship and marital problem solving dynamics? Working within a model of family problem solving it was proposed that field dependence/independence, a cognitive style personality dimension that has implications for information processing and interpersonal behaviour, would relate to marital relationship dynamics and in turn to marital problem solving dynamics. The independent variable considered was four types of marital couples with respect to type of cognitive style combined with gender. The dependent variable was inclusive of three areas pertaining to problem solving dynamics: (a) marital structural properties indicated by couple perception of marital cohesion and marital adaptability; (b) marital interaction indicated by the amount of interaction, the distribution of interaction, and the sequencing of interaction; and (c) problem solving effectiveness as indicated by the couples' perception of their ability to solve problems and their satisfaction with their problem solving efforts.

CHAPTER II

CONCEPTUAL FRAMEWORK

In a study concerned with determining the influence of cognitive style constructs on marital problem solving dynamics, it is necessary to select a conceptual framwork capable of accommodating individual and couple dynamics as well as the relationship between these two levels of functioning. In addition, it is necessary to identify a framework that would be compatible with both family problem solving theory (Klein & Hill, 1979) and psychological differentiation theory (Witkin, Dyk, Faterson, Goodenough, & Karp, 1974). General systems theory is a theoretical model (Bertalanffy, 1955) which has sought to consider those systems concepts which are relevant to all open systems including both the individual and the family. As a result, general systems theory has been applied to theories of the individual's style of cognitive functioning (Royce & Buss, 1976; Werner, 1957) and theories of family functioning including the marital dyad (Broderick & Smith, 1979; Jackson, 1965; Klein & Hill, 1975; Speer, 1970; Wertheim, 1973, 1975).

A system by definition is a set of interacting parts and the relationship that exists among the parts. Such interdependence implies that any change that occurs within one part of the system will bring about a change in the other parts of the system and the system as a whole. A family system in this respect is a unit that is composed of interdependent members who interact with one another. Any change in one member will influence the other members (Hill, 1971). In order to further elaborate upon the relationships that exist among members from a systems point of view, these relationships can be regarded with a view to both their structure and their process (Royce & Buss, 1976).

System Structure

The scope of systems application includes a hierarchy that extends from the very small system such as the cell to the very large supra-national system and several varying sizes in between (Miller, 1973). In order to bring clarity to the notion that the universe includes a hierarchy of smaller systems within larger systems one can speak of various levels of systems. The higher level systems subsume those smaller systems which exist at a lower level. The accompanying result is that higher level systems will have qualities that are greater than the characteristics of the parts of which they are comprised. Within the hierarchy of systems, then, a subsystem is in effect a system within a larger system or supra system. The subsystem in this respect is a component of a larger system with a particular function that is directly related to the larger system of which it is a part. The structural dimension of a system then refers to the arrangement of the various subsystems of a system at any particular time within the history of a system (Royce & Buss, 1976). These subsystems are separate entities with particular functions that are independent of the larger system and the other subsystems. The functions served by the subsystems, however, bring them into relation with the other subsystems and the larger system of which they are a part. As such, the various subsystems are marked by boundaries which delineate them from each other and the larger system. The larger system as well is marked by boundaries which delineate it from other systems and the environment of which it is a part. The purpose served by system boundaries is one of regulating the degree of segregation and relatedness of a subsystem from other subsystems and the larger system. Within a given system structure, then, there are varying degrees of system differentiation or separateness of subsystem functioning within a context of relatedness. System differentiation, then, depends upon how the various subsystems within the system function in relation to one another and the system as a unit.

In applying the notion of system structure to this study, two levels of systems analysis have been considered: The marital system is the larger system and the two individuals in the dyad are the subsystems within the marital system. At the level of the marital system consideration has been given to the individual subsystems and the relationship that exists between them. At the level of the individual subsystem consideration has been given to the personalities of the individuals as structured in part by a cognitive component which has a particular influence on how the individual subsystem functions within the marital system. In viewing the marital system structure from the smallest level of analysis under consideration to the largest, it can be stated that cognition was considered within personality, personality within the individual subsystem and the individual subsystem within the marital system.

The relationship among these various component parts was considered with respect to the degree of differentiation that exists among them. The degree of differentiation within a system structure has been determined to relate to the overall functioning of the system in a congruent manner (Witkin, Goodenough, & Oltman, 1979). The importance of this concept in this study is that it provides a link between the individual level of system analysis and the marital. At both the individual and marital levels of analysis in this study, differentiation refers to degree of segregation of component parts (Witkin et al., 1974). A more differentiated system is likely to be more complex and have more definite boundaries among its component parts and between itself and the outer environment than the less differentiated system. For example, at the individual subsystem level the more differentiated person functions with a greater degree of segregation of psychological functioning than the less differentiated person and is more capable of seeing him/herself as a separate identity (Witkin et al., 1974). In this respect he/she is better able to distinguish the differences between his/her own thoughts, feelings, attributes and needs and those of others than is the undifferentiated person. The undifferentiated individual, on the other hand, with a lesser degree of segregation of psychological functioning, shows more connectedness between self and others. The degree of differentiation within an individual has implications for interpersonal behaviour. The differentiated individual will more readily discern and demand distinct differences between him/herself and others. Such an individual is more inclined to function autonomously while the undifferentiated person, being more connected to others, is more likely to turn to others as external referents (Witkin et al., 1974).

In order to gauge the level of differentiation of an individual in this study, the field dependence/independence cognitive style has been used. Field dependence/independence as a cognitive style refers to a tendency by an individual to rely on self (field independent) or non-self (field dependent) as primary referents in processing information (Witkin & Goodenough, 1976). The particular style adapted is said to be a result of psychological differentiation or the degree of self and non-self segregation (Witkin, Goodenough, & Oltman, 1979). The theory states that the field independent individual who functions with greater autonomy tends to develop individual cognitive restructuring skills, whereas field dependent individuals tend to develop interpersonal competencies to a greater extent (Witkin et al., 1979). In other words, psychological differentiation is related to cognitive style orientation which in turn influences the development of abilities related to cognitive restructuring skills and interpersonal competencies. To determine an individual's level of differentiation by a measure of their field dependence/independence provides a method for determining, to a certain extent, information about their style of information processing and relating interpersonally.

Whereas psychological differentiation theory has provided a means for determining the level of differentiation in the individual subsystem via a measure of field dependence/independence, there is no provision made for a measure of a dyadic system differentiation. The circumplex model of marital and family systems proposed by Olson and associates (1979) offers two concepts which would appear to provide a necessary link to differentiation within a systems theory. In this model, marital cohesion and adaptability are two dimensions of marital and family behaviour used to describe marital and family dynamics in a way that closely resembles those ideas found within differentiation theory. Marital cohesion, for example, refers to the degree of bonding in a marital relationship. The model proposes that levels of cohesion ranging from separated to connected are related to marital functioning. The apparent similarity between differentiation and cohesion is the idea of varying degrees of autonomy within a context of relatedness. The suggestion being made, therefore, is that an individual psychological characteristic, differentiation, will relate to a similar marital characteristic, cohesion. For example, a field dependent individual, considered to be less differentiated psychologically and to have less of a sense of separate identity, is characteristically more sensitive to issues pertaining to relationship cohesion than is a field independent individual (Witkin & Goodenough, 1976). What the nature of the marital relationship will be, then, will be influenced by the degree of differentiation of the marital partners in relation to one another.

Similarly, marital adaptability would seem to provide a necessary link with differentiation theory, although the fit is not as clear-cut as with marital cohesion. Marital adaptability refers to the extent to which the marital system is flexible and able to "change its power structure, role relationships, and relationship rules in response to situational and developmental stress" (Olson et al., 1979, p. 12). The proposal is that the levels of adaptability which range from structured to flexible contribute to marital functioning (Olson et al., 1979). The apparent link between marital adaptability and individual psychological differentiation is that highly differentiated individuals are characteristically more structured due to their greater extent of self and non-self segregation and, therefore, are more inclined to function in a structured and less flexible manner in relation to others. For example, a field independent individual, considered to be more differentiated with a greater sense of separate identity, is more inclined to function in a less flexible manner in relation to others. In other words, field independent individuals would likely be less adaptive interpersonally.

In summary, to this point it has been proposed that conceptually this study is concerned with two levels of systems analysis, which are the individual level and the marital level. Although the marital system is the primary focus of the study, in order to understand the relations of the two individual subsystems that comprise a marital system, it is necessary to take into account the contribution that each subsystem makes to the whole. The structure of the marital system then was analyzed first with a view to determining the degree of differentiation that exists in each individual subsystem by measuring the field dependence/independence of each marital partner. Secondly, the degree of differentiation that exists in the marital system was determined by a measure of marital cohesion and adaptability. In this way, a measure of differentiation provides for a necessary link between the two levels of systems analysis. Having discussed the theoretical structure of a marital system, it is now possible to discuss the way in which this view of a marital system structure relates to the way in which the marital system functions.

System Process

The process dimension of systems analysis refers to the change that takes place in the system over time. One of the aspects of systems process relevant to this study is information processing, which is considered to be important for understanding system behaviour (Royce & Buss, 1976). At the level of the individual, information processing includes the intervention of the individual's cognitive and affective components in order to transmit and transfer incoming information and respond accordingly. The immediate goal of such information processing for the individual is the maintaining of a non-stressful state of functioning. At the marital level of functioning the predominant feature of information processing is the communication process (Buckley, 1967). The immediate goal of these communication processes is the negotiation of a familiar level of functioning between marital partners. The interplay between the two levels of systems occurs when each partner tries to maintain a behavioural pattern which provides the greatest level of satisfaction for both him/herself and his/her marriage partner (Lederer & Jackson, 1968).

In order to utilize this particular system function which is relevant to both levels of systems analysis, this study has chosen to focus on marital problem solving as an occasion for observing information processing at both system levels. In the marital problem solving situation, a problem is defined as "any situation involving an unachieved but potentially attainable goal in which the means for overcoming barriers to achieving the goal though not immediately apparent are considered feasible" (Klein & Hill, 1979, p.495). The goal under consideration would be a "desired state of affairs whose attainment requires some sort of activity" (Klein & Hill, p.495). The barriers to the attainment of the goal are those conditions which impede the attainment of the goal, thus creating a certain degree of ambiguity about the possibility of goal attainment.

As was mentioned previously with respect to information processing, an important factor to be considered in moving from individual problem solving to marital problem solving is the interaction component. The individual problem solving effort can be considered as a cognitive, perceptual activity while the marital problem solving effort must be considered as an interaction process. In going from individual to marital problem solving, two considerations must be taken into account. These are the nature of the goal structure and the organization of the behaviour of the partners (Klein & Hill, 1979). It is with respect to these two considerations that there is again a link to the individual cognitive style differences mentioned earlier.

The nature of the goal structure according to Klein and Hill has to do with the setting up of the problem solving process. Problem solving begins, they say, when a common goal is agreed upon; therefore negotiation must take place first in order to establish goal consensus. An integral part of attaining goal consensus is the clarification of goals and the establishing of a hierarchy of goals before setting out to discuss ways and means of achieving them. Success at this task will facilitate a more effective handling of the subsequent problem solving task. In other words, good problem solving necessitates the effective structuring of goals. This task requires the ability to disembed problems from the context of daily living. Furthermore, it requires the ability to clarify the apparent needs to be met and the ability to structure a hierarchy of goals to meet these needs. In addition to interpersonal skills, the ability to give structure to ambiguous situations is needed. As previously mentioned, those individuals of a field dependent cognitive orientation should be better at the interpersonal skills while the field independent individuals should be better at the structuring skills (Witkin & Goodenough, 1976).

The second major consideration in marital problem solving is the organization of the behaviour of the partners into an interaction pattern aimed at problem consensus, solution and evaluation (Klein & Hill, 1979). Klein and Hill suggest that interaction structured for problem solving becomes stylized so that identifiable roles are observable in problem solving situations. For example, one individual may take on the role of arbitrator, another may be a facilitator, and still another a non-participant and so on. The suggestion being offered in this study is that in a marital problem solving situation those observable roles will likely be consistent with the cognitive style characteristics of each individual in the marriage. For example, one would expect that field dependent individuals, given their tendency to rely on external referents, would not assume leadership roles in problem solving, but rather would take on more supportive roles which complement the leadership of the other in the problem solving task.

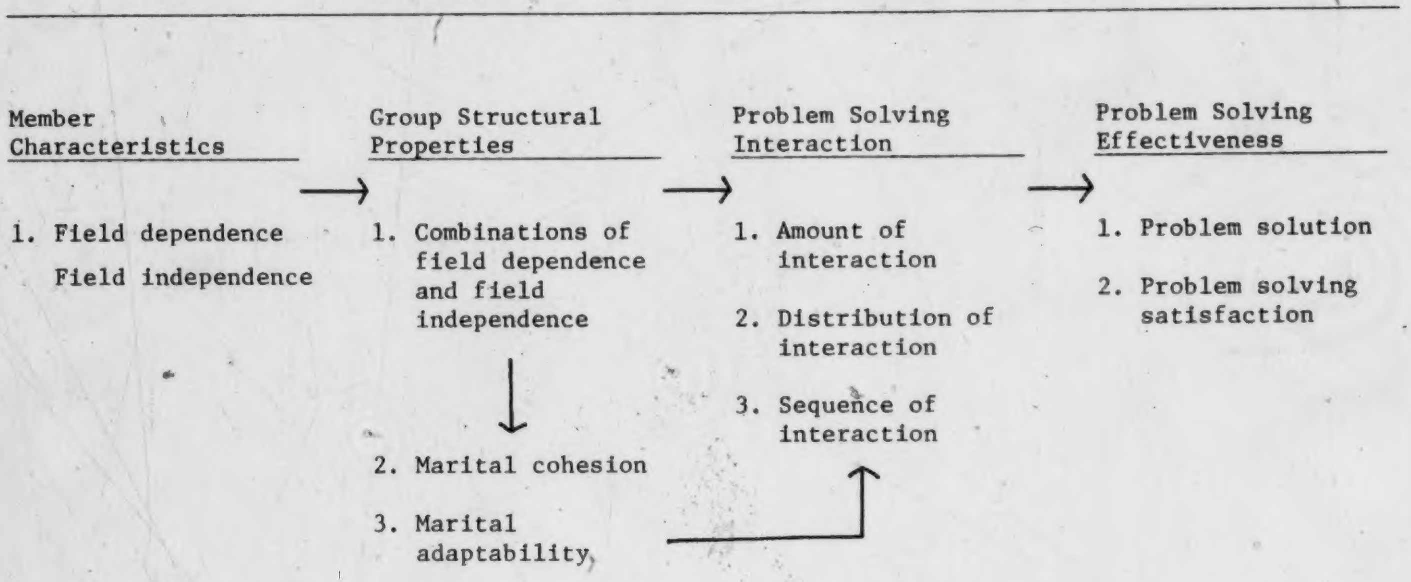
An Integration of Two Levels of Systems Analysis Within a Proposed Theory of Marital Problem Solving

Having discussed the various aspects of this study within the framework of general systems theory, this third major section of the conceptual framework will serve to integrate those various aspects into a theoretical model of marital problem solving which will add further clarity to the organization of the study. For ease in following the discussion, this section has been supplemented with a diagram that outlines the various component parts involved in this study (see Figure 1).

The theoretical model of family problem solving proposed by Klein and Hill (1979) is stated to be compatible with general systems theory. Although it is stated to be a family problem solving model in this study, it is referred to as marital problem solving since marriage is

Figure 1

The Relationship Among the Marital Problem Solving Components


Member Characteristics
1. Field dependence
Field independence
Group Structural Properties
1. Combinations of field dependence and field independence
2. Marital cohesion
3. Marital adaptability
Problem Solving Interaction
1. Amount of interaction
2. Distribution of interaction
3. Sequence of interaction
Problem Solving Effectiveness
1. Problem solution
2. Problem solving satisfaction

the particular form of family being considered in this study. The theory is particularly useful for this study in that it has been structured in such a way as to include concerns of both a sociological and psychological nature. In charting the effect of psychological influences on marital problem solving, the relevant factors under consideration are "member characteristics" which relate to "group structural properties". These in turn have an effect on problem solving process dimensions referred to as interaction and problem solving effectiveness.

Member characteristics are defined as the skills or competencies possessed by family members who are marriage partners (Klein & Hill, 1979). It has already been suggested that field dependence/independence is an appropriate operationalization of this component in that field dependence/independence is related to the two important problem solving skills of problem structuring and social sensitivity. Within a marriage system, these two cognitive styles can combine to form four possible types of marital arrangements. Klein and Hill refer to such arrangements as "group structural properties", meaning the distribution of competencies as they contribute to organization features and interactional patterns in marriage (Klein & Hill, 1979).

As discussed earlier in this chapter, cohesion and adaptability are the two dimensions of the marital system structure which are compatible with differentiation theory as applied to the individual subsystem. These two system structures are also group structural properties. Marital cohesion is a concept chosen by Klein and Hill as a group structural property and marital adaptability is a concept that is similar to the group structural property which Klein and Hill call developmental flexibility (Klein & Hill, 1979).

In this study, then, a major concern has been to determine if there is a relationship between the various combinations of individual cognitive styles, member characteristics, and marital structural properties as measured by marital cohesion and adaptability. Furthermore, combined member characteristics and group structural properties are considered to be linked to interaction behaviours; therefore a subsequent area of analysis was that of marital interaction as it pertains to marital problem solving effectiveness. Three areas of analysis were considered as being relevant to marital problem solving and related to cognitive style influence. These three areas are the amount of communication, the distribution of interaction and the sequencing of interaction. The interactional component of this study has been selected to provide descriptive information on both the style of the couples' interaction as well as the problem solving process itself. The purpose of selecting these variables was twofold: First, they are valuable in describing any differences that may or may not exist among the couples representing various cognitive style combinations; and secondly, they provide a valid link between the couples and their problem solving effectiveness (Klein & Hill, 1979).

Of final consideration in the problem solving model and in this study has been consideration of the couples' perception of the quality of and their satisfaction with both the problem solving process and the solution. In this study these have been considered with respect to both the immediate problem solving situation as well as their problem solving efforts in general. Given the fact that the field independent cognitive style lends itself more to certain marital problem solving skills such as disembedding and structuring goals and the field dependent orientation lends itself more to interpersonal skills, it remains to be seen how various combinations of these styles will influence the perceived problem solving effectiveness of the various couples.

In summary, the conceptual framework chosen for this study was general systems theory. The value of systems theory for this study has been its utility for incorporating the individual and the dyad levels into a systems analysis. Marital cohesion and adaptability as proposed within a circumplex model of marital and family dynamics were seen as adequately representing the systems notion of differentiation at the marital level. The individual subsystems were considered from the psychological differentiation theory perspective and measured by field dependence/independence. Because of the possible influence of field dependence/independence upon competencies related to marital problem solving including problem structuring and social sensitivity skills, the marital problem solving model proposed by Klein and Hill has served as a model by which to organize the various components of this study.

CHAPTER III

REVIEW OF THE LITERATURE

There does not appear to be much research regarding the role of psychological differentiation in marital problem solving, therefore a history of the development of psychological differentiation theory will be presented first. This will give added clarity to conceptual ideas discussed in the previous chapter and lead up to the second section which is a discussion of the pertinent field dependence/independence literature. Of special consideration in this section will be the two components of this cognitive style construct that appear to be relevant to marital problem solving. These are cognitive restructuring and social sensitivity skills. The third section of this chapter will include a discussion of the marital problem solving literature particularly as it pertains to the variables relevant to this study.

A History of the Development of Psychological Differentiation Theory

Witkin and associates (1974) introduced psychological differentiation into the literature on personality in order to give structure to his experimental findings in the study of field dependence/independence. Research related to psychological differentiation began with Wertheimer's classic study of a person's perception of an upright object in space (cited in Karp, 1977). The issue under consideration was the type of cues used by individuals in determining the verticality of objects. Were the cues provided by the visual environment or were they provided by the body of the perceiver? Wertheimer concluded that, in this body adjustment test, the visual cues provided by the environment were predominant. Subsequent research by Witkin began with the development of the rod and frame test (Witkin & Asch, 1948) and the body adjustment test (Witkin, 1949). Both tests were a means of studying the individual's perception of the upright. He concluded that individuals differed in the extent to which they used either external environmental cues or internal cues. From this point Witkin's focus shifted to the characteristics of individuals that might contribute to the different ways in which they arrived at their perception of the upright. In other words, he became concerned with individual differences in perceptual and personality characteristics as they were related to a person's tendency to rely on external or internal cues during studies of the perception of the upright. This led to the development of the Embedded Figures Test (Witkin, 1950) as a correlate to the rod and frame test and the body adjustment test.

With the Embedded Figures Test (E.F.T.), subjects were shown a simple geometric figure and then instructed to find the figure when it was embedded within a complex design. The complex design was structured in such a way that the simple figure was an integral part of the more complex pattern and therefore hidden within it. In order for a subject to find the simple figure within the complex design, it was necessary to restructure it in one's mind in such a way as to expose the simple figure. Subjects who found it difficult to perceive the simple figure within the complex design also had difficulty separating the rod from the frame in the rod and frame test or the body from the room in the body adjustment test.

In the Embedded Figures Test it was determined that individuals who relied primarily on environmental cues took longer to find simple geometric figures embedded within more complex ones than individuals who were reliant on their own ability to break up the environmental pattern and reorganize it in order to expose the hidden figure. With the correlated results that emerged from the studies involving these various perceptual tests, it was determined that what the three tests had in common was the ability to determine the degree to which the individual was dependent upon the immediate visual field surrounding an object in making judgments about the object. Emerging from the above evidence was the term field dependence/independence as a description of various perceptual orientations adopted by individuals engaged in these perceptual tasks. The field dependence/independence dimension came to represent a continuum of relative positions from the field dependent orientation to the field independent orientation. On perceptual tasks that involved separating an item from its organized field or context, field dependent persons were said to be reliant upon external referents while field independent persons were said to be reliant upon internal referents. In other words, field independent persons were considered to have a greater ability than field dependent persons to break up a configuration and isolate relevant cues from an embedding context (Witkin, Lewis, Hertzman, Machover, Meissner, & Wapner, 1972).

Studies by Witkin and associates from 1954 to 1962 led to a broadening conceptualization of the field dependence/independence concept (Witkin & Goodenough, 1976). These studies were concerned with relating disembedding ability in perception to disembedding ability in intellectual functioning. In relation to intellectual functioning, it was determined that disembedding was in effect an analytical ability which involved problem restructuring skills. In this context, restructuring skills referred to the ability to act upon a problem solving task by organizing it or imposing structure where it may be lacking. Field independent persons have been found to possess a restructuring ability and, therefore, will act upon the stimulus material presented to them whereas field dependent persons will leave the stimulus material as is (Witkin et al., 1974). This difference in problem solving orientation was felt to depict an articulated versus non-articulated cognitive approach. An articulated approach is one in which the individual has the ability to articulate an item from its context and impose structure on a field when structure was lacking. The articulated field approach was contrasted by a global approach which referred to a preference to accept an item within its global field, as is, even if the field or context of the item was unstructured. The articulated field approach then became inclusive of the field independent individual style and global field approach inclusive of the field dependent individual style (Witkin et al., 1974).

As additional research continued to link individual differences beyond the scope of perceptual and intellectual functioning to additional areas, another theoretical effort was undertaken to conceptualize individual differences in psychological functioning. It was at this point that the concept of psychological differentiation was formally introduced (Witkin etal., 1974). Within the individual system hierarchy, differentiation was considered to be the highest order of individual difference constructs. As such it was theorized to be manifest in the lower order constructs that are influenced by it. These four functions as reviewed by Witkin and Goodenough (1976) are as follows. (a) Articulated cognitive functioning represents the ability to overcome embeddedness, a perceptual intellectual activity that relates to differentiation in cognitive functioning. (b) A sense of separate identity relates to the individual's ability to recognize those characteristics such as attributes, values and needs that represent the self as distinct from those same characteristics which make for the identity of others. Those persons with a greater sense of a distinct personal self are more inclined to function with a greater sense of personal autonomy than those who have a less differentiated view of themselves in relation to others. (c) Articulated body concept is related to an individual's ability to perceive a body as discreet within a structure. (d) Control over impulse expression and the use of specialized defenses in dealing with potentially threatening circumstances is a fourth category of differentiation. Greater differentiation is revealed by more specialized defenses such as intellectualization, whereas less differentiation is revealed by unspecialized defenses like repression, denial, and indiscriminate turning away from external threats.

Given the self consistent nature of psychological functioning, it was argued that with a measure of any one of these categories of psychological differentiation, it would be possible to infer with a high degree of probability a number of characteristics which are likely to be present within the individual personality under certain circumstances (Witkin et al., 1979). In other words, the degree of differentiation determined by an individual's articulated cognitive functioning ability can be expected to relate to that individual's sense of separate identity, articulated body concept, and use of specialized defenses. In determining, then, the degree of differentiation with respect to any one of these four categories, one can infer a wide range of behavioural characteristics related to all four categories. One benefit of this particular conceptualization has been the utility of field dependence/independence theory as a measurable component of the articulated cognitive function category within the psychological differentiation scheme.

Field Dependence/Independence

Having discussed the field dependent/independent dimension in general, studies will now be presented that relate to two major areas of interest to this study, cognitive restructuring and social sensitivity skills. This section will be concluded with a discussion of the literature pertaining to cognitive style in relation to dyadic and marital relationships.

Cognitive Restructuring Skills

The cognitive restructuring ability associated with field independence includes skills related to breaking up an organized field, providing organization to a field lacking in organization, and imposing a different organizational field than the one that is in existence. There is a considerable amount of empirical evidence linking field independence to a variety of cognitive restructuring dimensions (Witkin & Goodenough, 1976b). In addition to perceptual disembedding which was described earlier, two other dimensions appear to have special relevance to this study, concept attainment and perspectivism.

Studies of concept attainment have indicated that field independent persons tend to adopt a hypothesis/testing approach to learning, while field dependent individuals learn gradually over the course of a number of trials (e.g., Nebelkopf & Dreyer, 1973). The hypothesis testing style is indicative of an active participant approach to learning as contrasted with a more passive, spectator approach. For example, in comparing cognitive style differences on strategies for comprehension of prose, Dayo (1983) found that as long as instructions regarding problem solving strategies were explicit, field dependents were able to benefit from a learning situation as much as field independents. In situations in which subjects were required to draw upon their own inferences, field independent subjects performed better. While field dependent individuals are capable of adopting a hypothesis testing approach, when they do they usually sample from a limited number of stimulus cues in constructing a hypothesis (e.g., Kirschenbaum, 1968; Shapson, 1973). Field independent individuals, however, tend to adopt a "wholist" strategy rather than a "partist" one in formulating hypotheses during problem solving (Witkin & Goodenough, 1976b).

Another cognitive restructuring ability characteristic of those who are field independent is referred to as perspectivism. Perspectivism is a term suggested by Werner (1948) to refer to the ability to recognize that one person's perspective may differ from that of another. If required, a differing perspective can be adopted for one's own. While perspectivism is a concept that is linked primarily to spatial visualization ability, it has also been considered in social situations. Feffer (1959) developed a task in which a subject makes up a story and then retells the story from the perspective of each of the characters in the story. Consistency of theme from story to story is a measure of an individual's perspectivism in this situation. Studies utilizing this task have generally found that field independent subjects have greater perspectivism than field dependent subjects (Fiscalini, 1975; Futterer, 1973; Perkins, 1973).

Essentially, then, field independent persons have particular cognitive restructuring skills which have developed as a result of their reliance on internal referents during problem solving situations. Some of the advantages field independent individuals have over field dependent persons in problem solving situations are related to their disembedding ability or their ability to isolate various situational components or organize problem situations that lack structure. Field independent individuals take an active approach to learning (Goodenough, 1976; Nebelkopf & Dreyer, 1973) and are better at concept attainment than field dependent persons (Provost, 1981). In self rating studies they describe themselves as being logical and theoretical (Pemberton, 1952) and on vocational interest tests show a preference for analytical areas of interest (Witkin & Goodenough, 1976a). In working with others, they are also capable of separating their own perspectives from those of others. These then are some of the advantages of field independent cognitive restructuring ability as related to problem solving situations. The disadvantages of the field independent orientation for marital problem solving may be in the fact that they prefer to work autonomously and marital problem solving requires interaction or social sensitivity skills as well. We turn our attention now to field dependence/independence in relation to the second component of marital problem solving, interpersonal behaviour.

Social Sensitivity Skills

Persons with a field dependent or field independent cognitive style will differ in their interpersonal behaviour in ways that are consistent with the theory of psychological differentiation (Witkin & Goodenough, 1976b). In general, field dependent individuals make greater use of external referents, are more attentive to social cues, and therefore have a more interpersonal orientation than field independent individuals who are more autonomous and impersonal in orientation. One of the specific ways in which this interpersonal orientation manifests is in regard to opinion change during group interaction situations. In one of the earlier studies, Linton (1955) found that field dependent subjects' judgment of movement during an autokinetic situation was significantly related to the effect of confederate input while field independents' judgment was not. Subsequent studies have confirmed these earlier results (Antler, 1964;

Balance, 1967; Birmingham, 1974; Wachman, 1964; Weinberg, 1970). These studies indicated that, in general, field dependent persons have a greater need for social approval, are more acquiescent or conforming, and are more apt to change their opinions in group interaction situations than field independent persons. In Shulman's study (cited in Witkin & Goodenough, 1976b), opinion change was studied in group situations in which the groups were required to arrive at consensus on an issue about which there was disagreement. Among the group members were stooges who outnumbered the subjects and, therefore, represented a majority opinion. The groups that failed to reach consensus included field independent subjects who would not change their opinions in the face of group pressure. Those groups with field dependent subjects, however, did reach consensus. One other significant study in this regard examined matched/mismatched dyads in a conflict situation (Oltman, Goodenough, Witkin, Freedman, & Friedman, 1975). Female subjects identified as field dependent or field independent using the Group Embedded Figures Test and Oltman's (1968) portable rod and frame test were paired on one occasion with a partner of similar cognitive style and on another occasion with a partner of differing cognitive style. Each dyad was given the task of reaching agreement on a course of action for several choice/dilemma problems for which it had been established that they disagreed. Subjects were given 15 minutes to solve the problems and three extra minutes if needed. Outcomes were classified as disagreement if neither partner changed her position in any way, opinion change if one partner gave up her position and totally accepted the position of her partner, and compromise if partners agreed to accept one course of action under certain conditions and the other course of action if these conditions were not met. The results of the study indicated that highly differentiated pairs failed to resolve their initial conflicts in an average of 35% of the problems they discussed. Matched undifferentiated pairs failed to agree on an average of 5% of their problems. Mixed pairs failed to reach agreement on 18% of their problems. These results indicate that in a conflict situation field dependent or undifferentiated individuals are more likely than field independent individuals to contribute to conflict resolution by accommodating to the views of others. In this situation then a field dependent matched dyad performed better than a matched field independent dyad in resolving conflict.

In ambiguous situations involving opinion formation or judgment, field dependent individuals are more prone than field independent persons to structure the situation by seeking information from others who are regarded as being knowledgeable informants (Witkin & Goodenough, 1976b). For example, in a study by Mausner and Graham (1970) subjects were placed in two-person groups and given the task of judging the rate of a flickering light. In the first trial each subject recorded the judgment of his partner. Each partner was then given different information about the accuracy of the results so that each thought that on the initial trial they were accurate and their partner was inaccurate. On a subsequent trial each partner was given false information about the partner's judgment prior to making his own judgment, which would thereby serve as a decision making aid. The influence of the partner's judgment was considered in relation to the extent of field dependence. Results indicated that for field independent subjects there was very little difference in partner influence between those who believed that they were more accurate in the initial trial run and those who were told that they were inaccurate. The field dependent subjects, however, who were told that they were inaccurate initially tended to shift their opinion in the direction of their partners, who they were led to believe were more accurate. When field dependent subjects were told that they were more accurate than their partners they showed a smaller shift toward their partner's opinion than did the field independent subjects. In other words, field dependent individuals are reliant on the opinion of others in situations in which the input of the other is considered to be helpful in increasing their effectiveness. Field independent individuals tend to maintain an individualistic strategy regardless of the situation.

The significance of the role of ambiguity for field dependent persons in social interaction situations is pertinent for situations involving role definition. Ambiguity of role definition was studied by Culver, Cohen, Silverman, and Shmavonian (1964). In this study different instructions were given to subjects before their involvement in a sensory deprivation experiment. Some subjects were given specific instructions prior to the experiment while others were given ambiguous instructions and very little feedback during the experiment. Based on measures of heart rate during the experiment, uninformed field dependent subjects appeared to be less relaxed when they were not sure what was expected of them than were informed field dependent subjects. For field independent subjects the opposite was found; informed field independent subjects were less relaxed than were the uninformed field independent subjects. Additional studies have tended to confirm the notion that field dependent persons are more comfortable when their roles are structured than when there is ambiguity surrounding role definition (de Groot, 1968; Gates, 1971; Steingart, Freedman, Grand, & Buchwall, 1975). Most of these studies involved an interview situation in which the subjects' behaviour during the interview was monitored. For example, Gates (1971) found that field dependent subjects were less communicative with a silent interviewer than a responsive one. In studies of therapy matched with cognitive style, supportive and structured therapy has been found to be preferred for field dependent patients while a more open, less structured therapy is preferred for field independent patients (Greene, 1972; Karp, Kissin, & Hustmeyer, 1970). While these studies tend to confirm the notion that field dependent persons make greater use of external referents than do field independent persons, Witkin and Goodenough (1976a) suggest that these major differences occur only in situations that are characteristically ambiguous.

Another area of significance in relation to field dependence and interpersonal behaviour is social sensitivity. Field dependent partners are attentive to social cues. They will look to their partner during problem solving, particularly if the problem is ambiguous and the partner is regarded as a reliable source of information (Johnson, 1973; Ruble & Nakamura, 1972). The intensity of their looking behaviour is increased if what they perceive is regarded as disapproving (Konstadt & Forman, 1965).

Field dependent individuals, being more socially sensitive, do better at tasks when others are present (Birnbaum, 1975). They are open to the feelings of others (Ancona & Carli, 1971; Westbrook, 1974) and will self disclose more than field independent individuals (Sousa-Poza, Rohrberg, & Shulman, 1973). They prefer physical closeness (Holley, 1972; Justice, 1969), smile more often (Mones, 1974), and demonstrate a greater amount of eye contact (Badarocco, 1973). Field independent individuals demonstrate nonverbal behaviours of a distancing factor including leg crossing, arm crossing, and leaning back (Mones, 1974).

Field independent individuals, not being as concerned with the social context, are more likely to express criticism or hostility, while field dependents will avoid such expressions, turning instead against themselves (Dengerink, O'Leary, & Kasner, 1975). Field independent individuals have been found to express negative acts more frequently (Goldstone, 1974). Goldstone observed four-person groups who were given the task of composing a story for a Thematic Apperception Test card. Using Bales' Interaction process definition of negative acts, it was found that there were more frequent negative acts in the field independent groups than either the field dependent or mixed groups.

In addition to the studies that have been mentioned, other areas of research point to further aspects of the field dependent social orientation. In terms of time orientation, the field dependent would prefer time spent in an interpersonal or relational context (Nevill, 1974) whereas the field independent individual would be more concerned with efficient use of time which may eliminate much social exchange as superficial to the task at hand (Arbuthnot, 1968). Similarly, for the use of space, field dependents prefer physical closeness (Justice, 1969) and become uncomfortable with increased distance (Greene, 1973; Holley, 1972). For interests and recreation, it has been determined that field dependent persons prefer team sports rather than individual activities such as jogging (Schreiber, 1972). On the Strong Campbell Interest Inventory, they prefer careers related to persuasive abilities while field independents enjoy analytical pursuits (Alcock & Webberley, 1971; Biggs, Fitzgerald, & Atkinson, 1971).

Field Dependence/Independence and Marriage

Having discussed the relation between field dependence/independence and interpersonal behaviour in general, I wish to focus on field dependence/independence in dyadic and marital situations in order to discuss the implications of cognitive style match and mismatch for specific behaviours. In general, most studies in this respect have examined the consequences of cognitive style match/mismatch in relation to teacher-student and patient-therapist dyads. The results from these studies support the notion that matched dyads tend to develop positive feelings towards each other and mismatched dyads develop negative feelings (Di Stefano, 1970; Folman, 1973; Greene, 1972; Lockheed, 1977; Packer & Bain, 1978; Sousa-Poza & Rohrberg, 1976). For example, Di Stefano (1970) found that students and teachers who were matched for cognitive styles rated each other more positively on cognitive and personality attributes than did mismatched students and teachers. While these studies have examined some of the various effects of cognitive style in stranger dyads, few studies have examined the relevance of psychological differentiation within a marital situation. One recent study, however, has produced results which differ from predictions based on the literature cited above. Sabatelli, Dreyer, and Buck (1983) examined field dependence/independence as a potential mediator of relationship quality in married dyads. Based on Witkin's theory of psychological differentiation, it was hypothesized that couples with matched levels of differentiation would have fewer complaints and that spouses married to field dependent partners would have fewer complaints due to the interpersonal orientation of field dependent persons. Fourty-eight couples with a mean age of 24.6 years and a mean length of marriage of 32.8 months took part in the study. The independent variable, field dependence/independence, was measured with the Embedded Figures Test (E.F.T.). The dependent variable was assessed with the Locke Wallace Short Marital Adjustment Test (Locke & Wallace, 1959) and the Ryder Lovesickness Scale (Ryder, 1973). Husbands' and wives' E.F.T. scores and their E.F.T. difference scores were correlated with their own and their partners' two measures of marital complaints. The results of the study, contrary to expectations, yielded evidence that both field dependent and field independent husbands married to field independent partners had fewer Locke Wallace complaints than those married to field dependent wives. Wives from dyads with mismatched cognitive styles had fewer Locke Wallace complaints than wives from dyads with matched cognitive styles. The authors suggest that the differences between long term relationships and adhoc dyads may account for differences found in this study as compared to studies of dyads done previously. For example, they suggest that in a long term situation, men may find interacting with field dependent women difficult since they require considerable social and interpersonal support. On the other hand, field independent wives may contribute more to a sense of separateness and independence in a marriage relationship. It is difficult to draw conclusive inferences from one study; however, the unexpected results clearly point to the need to pursue further research with respect to the mediating effect of cognitive style on marital interaction.

Marital Problem Solving

According to Klein and Hill (1979), the heritage of family problem solving analysis can be traced to the following areas: (a) the family and social problems (Goode, 1961; Sprey, 1966); (b) family crisis and adjustment (Farber, 1964; Hanson & Hill, 1964; Hill, 1949); (c) normal family development (Aldous, 1974; Duvall, 1971; Hill & Rodgers, 1964; Rapoport, 1963); (d) small group problem solving; and (e) decision making (Bales & Stodtbeck, 1951). Turning now to family problem solving research, a number of noted researchers have contributed to theoretical advances in the family problem solving area during the past sixteen years (e.g., Reiss, 1971a, 1971b, 1971c; Straus, 1968; Tallman, 1971). Subsequently a number of efforts have been made to combine and integrate relevant ideas pertaining to family problem solving (e.g., Aldous, 1971; Klein & Hill, 1979; Klein, 1983). The problem solving concepts deemed relevant to this study are some of those which Klein and Hill (1979) have selected from among the various strands of family problem solving literature and woven into a theory which proposes several determinants of family problem solving effectiveness. The literature pertaining to the concepts integral to this study has been discussed as follows: (a) cognition as it relates to family problem solving; (b) cohesion and adaptability as group structural factors in family problem solving; and (c) the amount, the distribution, and the phasing of interaction as three major areas of interaction considered to be relevant to family problem solving effectiveness.

Cognition and Family Problem Solving

In a discussion of the structural properties of the family group, Klein and Hill (1979) acknowledge that similarities and differences among family members include not only cultural factors but also traits such as age, gender, interpersonal skills, and cognitive skills. In this regard the distribution of cognitive skills in a marital relationship is one way of examining couple cognitive style competencies related to problem solving. Precedent for this assertion can be found in the family problem solving literature.

In a study which linked the cultural variable, social class, with family problem solving effectiveness, Straus (1968) tested three factors as a possible rationale for differences he discovered in "blue and white collar" family problem solving effectiveness. Of special note are the factors of creativity and communication. Creativity for

Straus was a major component of what he referred to as a cognitive style theory. He defined creativity as originality of thought or the ability to break up perceptual sets and he operationalized it as the number and range of ideas for problem solution. His finding was that middle class families were more effective problem solvers in part due to their greater ability to be creative or flexible at generating problem solutions. Since middle class families were considered to be more verbally fluent than blue collar families, the second factor considered, the amount of communication, was theorized to be related to class differences and problem solving as well. Low correlations were found for both creativity and communication in relation to problem solving effectiveness. As a result of these findings, a limitation of this study was that creativity and communication were not found to be an adequate explanation for the differences in problem solving effectiveness found to exist in the various social classes. Although the evidence from this study was not conclusive, it did lend support for the role of creativity or cognitive style and communication in relation to problem solving effectiveness.

Elaborating on the research of Straus, Tallman (1970) theorized that the cognitive style dimension was one of a number of related ideas pertaining to problem solving effectiveness. In general, an elaborative cognitive style would be capable of specifying and differentiating situational cues as opposed to simplistic interpretation. In his structural/cultural theory of family problem solving, Tallman suggested that two important group structural variables, cognitive style and power relationships, would contribute to differences in social class problem solving effectiveness. Cognitive style was defined as creativity and elaborateness of language, which he felt required a power structure to facilitate a maximum openness of communication and coordination of family effort at solving problems. The two factors, cognitive style or verbal capacity and family power structure, were included in a study of social class and problem solving effectiveness (Tallman & Miller, 1974). In this study, verbal capacity included the openness and amount of communication as well as the elaborateness of speech style. The results of this study failed to support the earlier findings of Straus (1968) in that problem solving effectivess did not relate to communication.

A third study involving social class and family problem solving effectiveness (Cohen, 1974) considered the role of communication style in problem solving as well as leadership patterns. It was proposed that white collar families might rely on verbal communication and blue collar families would rely on non-verbal communication. Among Cohen's findings were the following: (a) There were no class differences found with respect to family problem solving effectiveness; and (b) for both classes the rate of verbal communication was positively and significantly related to family problem solving effectiveness as measured by performance on a laboratory game. This finding lends support to Straus' (1968) earlier findings about the relationship between amount of communication and family problem solving effectiveness.

Though there have been contradictory results among these early studies of social class and marital problem solving effectiveness, they would appear to offer limited support for the suggestion that cognitive style is a factor in family problem solving effectiveness. In all of these studies the cultural variable, social class, is related to cognitive style and operationalized as creativity (Straus, 1968), verbal style and capacity (Tallman & Miller, 1974), and style of communication (Cohen, 1974). The underlying premise is that families from different social classes will reveal differences in cognitive functioning as reflected in a family problem solving context. Studies of socialization, problem solving style and cognition cited in a review article by Bee (1971) lend support for class differences in problem solving and to the suggestion that family problem solving is structured, in part, by cognitive competency traits. In these socialization studies, many traits which included creativity and the amount and style of communication were found to relate to a variety of determinants of problem solving effectiveness.

A separate body of literature relating cognition to family problem solving has been generated within the research efforts of David Reiss and his associates (1981). Reiss' theory of consensual experience has advocated that a crucial component of the experience of being a part of family is the sharing among family members of a common perception of the environment and the family's place within the environment. The family's cognitive perceptual orientation then will affect its' problem solving efforts. In this regard, Reiss has studied three family cognitive perceptual orientations which he refers to as environment-sensitive, interpersonal distance-sensitive, and consensus-sensitive (Reiss, 1971a). The environment-sensitive family perceives the environment as predictable and controllable and therefore works together at interpreting the environment. The interpersonal distance-sensitive family orientation is one in which the family perceives the environment as controllable but members are more individualistic in their approach to the environment than the environment-sensitive family. In the consensus-sensitive family orientation, the family perceives the environment as threatening, chaotic and unknowable. This family is highly coordinated, effective at utilizing cues from one another, but ineffective at processing cues from the environment. In relating these family typologies to problem solving, Reiss has considered basically the following three variables: (a) problem solving effectiveness, (b) coordination, and (c) closure. Problem solving effectiveness is defined as the contribution of the family effort to problem solution and the extent to which the problem solution is detailed and structured as contrasted with a simple chaotic solution (Reiss, 1971a). Coordination refers to the family members' ability and cooperation at developing problem solutions that are similar. Closure refers to the families' characteristic style of either suspending or imposing familiar structure on sensory experience and the speed with which closure is initiated despite additional information (Reiss, 1971a). Some of the expected relationships between the three family typologies and these problem solving variables are as follows: (a) Environment-sensitive families would rate high on problem solving effectiveness and coordination and low on closure; (b) interpersonal distance-sensitive families would rate moderately high at problem solving effectiveness, low at coordination, and rate variable with respect to closure; and (c) consensus-sensitive families would be ineffective problem solvers but highly coordinated and high with respect to closure (Reiss, 1971a). Studies of the above theory which most often have been based on psychiatrically diagnosed, populations have supported the stated links between the three family types and problem solving performance with respect to effectiveness, coordination, and closure (Reiss, 1971b, 1971c).

Reiss' theory of consensual experience has been criticized for various reasons including his use of psychiatrically diagnosed populations as well as his blending of independent variables (orientations, cognitions, perceptions) and dependent variables (problem solving interaction patterns) in describing family types (Klein & Hill, 1979). Nevertheless, his research has demonstrated perhaps more than any other a persistent effort to link individual cognitive perceptual styles and family interaction. His research is of special interest to this study in that one can find the influence of field articulation theory (Witkin et al., 1974) in his work. It was Reiss' (1971a) contention that family problem solving effectiveness would require the ability to articulate structure in a complex stimulus field. Such a capacity on the family level is similar to that which was described in Witkin's concept of field articulation (Witkin et al., 1974). It was Reiss' (1971a) contention that families that are made up of field articulate individuals will develop concepts regarding their environment that are complex and structured. Furthermore, they would interact in such a way as to give one another the necessary opportunity to examine the stimulus field without coercion. In a study of families tested with three different types of problem solving procedures that allowed for simultaneous analysis of both family and individual thinking, Reiss (1970) found that, while the families were interacting to produce solutions, the individuals were processing information in a field articulate fashion. In other words, the individuals were able to discard irrelevant cues and develop and articulate structure with respect to the stimulus field. The difficulty with the study was that formal field articulation assessment procedures were not utilized.

In pursuing the utility of field articulation theory for family problem solving further, it was suggested that not only would field independence account for problem solving effectiveness but field dependence would account for social sensitivity (Reiss, 1970; Silverman, 1967). In other words, field dependence would account for the perceptual basis of Reiss' notion of family coordination. In environment-sensitive families, which appear to demonstrate both structured and articulated concepts of their environment as well as social sensitivity skills, Reiss expected to find both field independent and field dependent members. Evidence from his research failed to support this suggestion (Reiss, 1970) and, after conducting further research, Reiss concluded that the perceptual dimension related to coordination is unrelated to field articulation. At this point alternative perceptual dimensions than field articulation were considered in order to account for this independent dimension of the family problem solving experience.

Unlike the previously discussed family researchers, Reiss has gone to great lengths to develop and test a theory of family problem solving that has attempted to relate the cognitive-perceptual style of individual family members to family problem solving dynamics. While yet other theorists (e.g., Turner, 1970; Weick, 1971) have made reference to the role of cognitive competencies as a mediating factor in family problem solving, their efforts are of a theoretical nature.

In summary, it can be stated that while there are difficulties in determining the effect of combining individual cognitive style characteristics at the marital or family level of analysis, there would appear to be support for the notion that cognition is an important factor in the marital problem solving process. While acknowledging that the characteristics of family members are crucial to the understanding of the problem solving process, in studying the marital unit of analysis one must begin to assess the distribution effects of such variables as cognitive style (Klein, 1983). In this respect the studies mentioned have offered limited support for the notion that differing cognitive competencies or styles will have an effect on the problem solving process. This influence extends to the way a family perceives their environment, structures their relationship and their problem solving effort (Reiss, 1971a), and the way a family communicates (Cohen, 1974; Straus, 1968). Furthermore, it would appear that field dependence/independence theory does have a degree of compatibility with certain family problem solving concepts. Therefore, this study will explore the relationship of cognitive style to the amount, distribution and phasing of interaction.

Cohesion and Family Problem Solving

The significance of the cohesion dimension to marriage and family dynamics can be inferred from the reported evidence that there are forty concepts related to the cohesion dimension and that six different social science fields have utilized the concept (Olson, Sprenkle, & Russell, 1979). Some of the related concepts that appear in the literature are separatedness-connectedness (Hess & Handel, 1959), disengagement-enmeshment (Minuchin, 1974), differentiated self (Bowen, 1960), and mutuality (Wynne, 1958). In spite of the widespread support for the cohesion concept, two important related issues are mentioned within recent cohesion literature. Although marital and family cohesion has been discussed extensively it is a difficult concept to operationalize (Russell, 1980) and it is a concept that requires more empirical evidence to support widely held theoretical assumptions based mostly on impression and clinical experience (Bilbro & Dreyer, 1981). One of the observations called into question by Bilbro and Dreyer (1981), for example, is the one pertaining to the popular notion that a moderate level of systems cohesion is preferable to either a high or low level of cohesion. It is Bilbro and Dreyer's contention that there is not enough empirical evidence as yet to support this notion.

There is some support for the notion that extreme cohesion inhibits family functioning in Reiss' (1971b, 1971c) findings that families classified within his family typology as "consensus-sensitive" were highly coordinated on a laboratory test but ineffective in reaching a suitable problem solution. Additional support for the preferred moderate level of cohesion is cited in Russell's (1979) study of family triads which included parents and adolescent daughters. In this study family results on the Simulated Family Activity Measurement (Straus & Tallman, 1971), a structured family interaction game, were compared with self report questionnaires that measured four variables including cohesion and adaptability. The analysis of the data indicated support for the association between high family functioning and moderate cohesion and adaptability. Low family functioning was related to extreme cohesion and adaptability.

While there is some support for value of the moderate level of cohesion for family functioning, Bilbro and Dreyer's (1981) call for more evidence does not appear to be unfounded. In a recent theoretical update of a circumplex model of marital and family systems, Olson, Russell, and Sprenkle (1983) indicated the need for cohesion and adaptability data from couples and families spanning the life cycle. At this point it is only suggested as to what level of cohesion is related to optimal family functioning at various family development states. Most of the normative data available with Olson's circumplex model (1979) is related to the family with adolescent children. It is Olson's opinion (Olson et al., 1983) that couples in the early stages of marriage should tend to score within the mid-range of cohesion on the circumplex model of marital and family functioning. He does suggest, however, that couples or families with extreme levels of cohesion can function well as long as all the family members prefer it that way (Olson et al., 1983).

It was Turner's (1970) contention that family cohesion is positively related to family problem solving in that it provides for a supportive environment in which risk-taking and creativity are possible. Aldous (1971), on the other hand, suggested that, while cohesion can make the problem solving process enjoyable for families, too much cohesion can inhibit conflict, phasing rationality, and creativity. In other words it is possible to have a situation where a family is more concerned with group maintenance than with solving pertinent family problems. Within the Klein and Hill (1979) framework of problem solving effectiveness, cohesion is considered to both influence and be influenced by interaction patterns. The level of cohesion that exists prior to the problem solving episode is considered to have a positive influence on the amount of interaction, coordinative leadership, phasing rationality, expert power, and legitimacy of power. It will have an inverse influence on the concentration of interaction and the centralization of power. There are within the literature on marital and family cohesion differences of opinion as to the role of cohesion in problem solving.

Adaptability and Family Problem Solving

The concept of adaptability is referred to directly or indirectly within various marriage and family theoretical approaches. For example, within a family systems approach adaptability is defined in the following terms: "An adaptive family system can be conceptualized by an optimal, socio-culturally appropriate balance between stability promoting 'self-corrective' processes, or morphostasis, and change promoting 'self-directive' processes, or morphogenesis" (Wertheim, 1973, p. 286). A slightly altered but compatible definition of adaptability has come out of the family development literature (Hill, 1971; Hill & Rodgers, 1964). Within this approach adaptive families are seen as capable of change, adaptation, and the reordering of their structure in response to normal and inevitable changes in family life brought about by developmental processes. More specific still is Olson's definition of family adaptability referred to earlier. His definition bears repeating in this immediate context. Adaptability is "the ability of a marital/family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress" (Olson, Sprenkle, & Russell, 1979, p. 12).

Within the family problem solving literature Tallman has been one of the most involved with the adaptability concept (Tallman, 1961, 1970; Kieren & Tallman, 1972). In Tallman's (1970) typology of the determinants of effective family problem solving behaviour, this concept, "openness of communication", was related to attributes that are included in Olson's definition of adaptability. Among these attributes are included power, roles, and norms for negotiation. Openness of communication in relation to these attributes implies that optimal problem solving effectiveness requires flexibility and acceptance of change given the developmental nature of family. While the findings of Tallman and Miller (1974) did not find support for the communication variable in their study, they did find that equalitarian leadership styles were more conducive to effective problem solving.

This finding was confirmed in a study relating the adaptability dimension as defined by Olson to a sampling of clinic and non-clinic couples (Sprenkle & Olson, 1978). Using the same laboratory family problem solving game utilized earlier by Tallman and Miller (1974), Olson and Sprenkle (1978) found that couples with an equalitarian style of leadership functioned more adequately than couples who were either non-traditional or traditional. This was particularly evident when the relationship was supportive and the problem situation was stressful. When there was low support in the relationship, the husband dominant traditional style of leadership was suggested to be as effective as the equalitarian style. Least effective was the wife dominant, non-traditional style of leadership. Couples representing this style of leadership were theorized as being too adaptive. In relation to other variables, non-clinic couples were found to be moderately adaptive, more supportive, more creative, and more responsive than clinic couples. Other studies utilizing the adaptability dimension proposed by Olson have found that high functioning families had moderate scores on adaptability as compared to extreme scores of either high or low adaptability. These families were also found to score high on support and creativity (Russell, 1979).

Klein and Hill (1979) propose that developmental flexibility, a similar concept to adaptability, is positively related to the amount of interaction, coordinative leadership, phasing rationality, expert power, and the legitimacy of power and inversely related to concentration of interaction and centralization of power. Research on the adaptability dimension within a circumplex model of marital and family systems has indicated that couples and families scoring moderately adaptive are characteristically more supportive, creative, and flexible (Olson, Sprenkle, & Russell, 1979). With respect to the expected variation in level of adaptability due to developmental stages of families, Olson has suggested that couples in the early marriage stage most often score moderately adaptively or what he refers to as in the flexible and structured range (Olson, Russell, & Sprenkle, 1983). As stated previously in regard to cohesion, extreme levels of adaptability are not considered to be detrimental to marital functioning as long as both partners prefer the existing level (Olson et al., 1983).

In summarizing marital cohesion and adaptability the following suggestions have been offered by Olson and associates (1983). Although the support is not extensive, moderate levels of cohesion and adaptability are considered to be related to optimal family functioning. There may, however, be exceptions to this, particularly if family members agree on a preferred level of system functioning. Other exceptions may be related to stages of family development since normative data is not yet available for how normal couples and families tend to function with respect to cohesion and adaptability at various stages. In general, cohesion and adaptability are considered to be group structural variables that are positively related to particular problem solving interaction variables.

Communication

There are a considerable number of studies that have employed a wide range of research methodology to determine how distressed and non-distressed, adjusted and non-adjusted, satisfied and non-satisfied couples differ with respect to marital interaction variables. Some of these studies were conducted in a manner similar to this study in that the interaction was monitored during a conflict resolution laboratory session and then coded for analysis. Reference will be made to some of the pertinent results that were obtained.

In studies of distressed and non-distressed couples in which ten-minute videotaped segments of couple problem solving interactions were coded with the Marital Interaction Coding System, data showed that distressed as compared to non-distressed couples engaged in a greater frequency of negative behaviours and a reduced frequency of positive behaviours (Birchler, Weiss, & Vincent, 1975; Margolin & Wampold, 1981; Vincent, Friedman, Nugent, & Messerly, 1979; Vincent, Weiss, & Birchler, 1975). In the study by Margolin and Wampold (1981), base rate analysis of the couples as a unit included husband-wife sums to analyze for mean group differences as well as husband-wife differences. Data on summary categories which entailed a priori clusters of behaviours yielded significant results. Non-distressed couples emitted significantly more Problem Solving, Verbal Positive and Nonverbal Positive behaviours than distressed couples. Within these summary categories non-distressed couples showed more Problem Solution, Agree, Assent, Physical Positive and Smile/Laugh behaviours. Sex differences indicated that wives compared to husbands demonstrated more nonverbal positive behaviours, particularly Smile/ Laugh, and more verbal negative categories, in particular Complain and Criticize. This study failed to support the evidence that distressed couples exhibit more negative behaviours than non-distressed couples. A partial explanation for this discrepancy was that in studies where results were obtained in which negative behaviours discriminated distressed and non-distressed couples (Vincent et al., 1975, 1979) a standardized Inventory of Marital Conflicts Task (Olson & Ryder, 1970) was used and in this study with no negative behavioural differences (Margolin & Wampold, 1981) couples discussed individualized conflicts.

Some of the findings indicated from this study are supported by other studies utilizing a different research methodology. The idea that non-distressed couples exhibit a greater frequency of positive behaviours would appear to be similar to Olson and Sprenkle's (1978) claim that non-clinic couples were significantly more supportive than clinic couples. The results indicating a higher rate of neutral behaviours for non-distressed compared to distressed couples converge with findings in the family interaction literature which have indicated that well-adjusted families are characterized by high levels of simultaneous speech and overall involvement (Alexander & Parsons, 1973). Finally, sex differences indicating that wives were more positively expressive as well as more verbally negative are consistent with other studies (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972; Buck, Miller, & Caul, 1974; Notarius & Johnson, 1982). With the exception of the reference to Olson and Sprenkle

(1978), none of these studies involved problem solving effectiveness as a dependent variable. The findings, however, offer much by way of identifying those communication behaviours that discriminate distressed and non-distressed couples in problem solving situations.

The literature from the family problem solving field as reported earlier regarding studies by Straus (1968), Tallman and Miller (1974), and Cohen (1974) reported mixed results with respect to communication. On the strength of these studies, Klein and Hill (1979) have suggested that amount of verbal communication, nonverbal communication, and support are positively related to problem solving effectiveness. They do, however, state that no definitive empirical evidence exists either for or against any of the interaction variables in a problem solving context. On the strength of his own research in regard to a circumplex model of marital and family systems, Olson has proposed that couples with positive communication skills will tend to have more balanced FACES scores on cohesion and adaptability than couples with negative communication skills (Olson, Russell, & Sprenkle, 1982). He suggests that positive communication skills include clear and congruent messages, empathy, supportive statements, and effective problem solving skills. Negative communication skills include incongruent and disqualifying messages, lack of empathy, non-supportive or negative statements, and poor problem solving skills.

In summary, communication during problem solving can be considered to contribute to problem solving in the following manner. The amount of overall verbal communication, nonverbal communication, and support are positively related to problem solving effectiveness.

Positive verbal and nonverbal communication skills relating to problem solving can be considered to contribute to problem solving effectiveness in that they tend to be more frequent among non-distressed couples functioning in problem solving situations. And finally, these same positive communication skills are said to relate to more balanced scores of adaptability and cohesion by couples who are considered to be more functional at problem solving than couples who score on extreme ranges of these two dimensions. As such in this study the above can be used as determinants of problem solving effectiveness.

In addition, the distribution of interaction is considered to be a valuable complement to the consideration of amount of interaction in that it may help to determine such variables as centralization of power and coordinative leadership (Klein & Hill, 1979). These later two variables have already been discussed in relation to marital adaptability. Essentially, the literature discussed indicated that equalitarian leadership styles are conducive to effective problem solving (Sprenkle & Olson, 1978; Tallman & Miller, 1974), particularly when the relationship is supportive (Sprenkle & Olson, 1978). When there is low support in the relationship, the husband dominant leadership style is more effective that the equalitarian leadership style. The least effective leadership pattern of the three discussed was the wife-led, nontraditional style (Sprenkle & Olson, 1978).

Phasing Rationality

While problem solving rarely occurs according to neat stages (Crutchfield, 1969), there is some consensus that problem solving is a process that involves a series of phases (Aldous, 1971; Brim, 1962;

D'Zurilla & Goldfried, 1971). The phases of problem solving generally agreed upon are as follows: (a) identification and definition of the problem, (b) collection of information relevant to the problem, (c) innovation directed toward generating alternative solutions, (d) decision making regarding a choice of action from among various alternatives, and (e) following action steps, an evaluation of the consequences of the action taken (Aldous, 1971). Aldous (1971) has asserted that families may not exert the same phasing rationality as individuals or ad hoc groups and committees. It is her contention that families usually have limited knowledge about possible alternatives, seek solutions in order to maintain day to day functioning, and infrequently define problems explicitly. In this respect, while phasing rationality is important to family problem solving effectiveness, it should be considered within the limits of a family's resources.

Phasing rationality is implied as well within Reiss' theory of consensual experience (Reiss, 1971a). In discussing problem solving effectiveness, he suggests that a solution can be either detailed and structured or simple and chaotic. In addition he referred to the variable "closure" as the speed with which a solution is adopted and maintained. In operationalizing this concept he has considered the ratio of the time spent in the first half of a card sorting task trial to the total time spent during the trial.

In reviewing the literature related to this concept, Klein & Hill (1979) suggest that while there are few measurement procedures for this idea, it is an important area of research. Based on the studies of Reiss (1971a, 1971b, & 1971c), they suggest that it is positively related to problem solving effectiveness. In Reiss' studies environment-sensitive families who exhibited a logical search for a problem solution and delayed closure in solution until they had examined as much evidence as possible were considered to be effective at problem solving.

Summary and Research Questions

While there are not many studies that have examined psychological differentiation in relation to marital variables, there is enough evidence to suggest that there are potential links that require further examination. Based on the literature considered in this chapter, a reasonable assumption would be that the cognitive construct field dependence/independence with its accompanying cognitive restructuring and social sensitivity skills would have a mediating effect on the marital problem solving situation. The research by Sabatelli et al. (1983) has indicated that it is difficult to make predictions about psychological differentiation in a marital context with certainty. Primarily for this reason, the research undertaken in this study has been exploratory and is structured by a number of questions and subquestions concerning the possible relationship of cognitive style to marital problem solving variables. The specific nature of each of these areas of inquiry has been based on inferences drawn from the previous research and the theoretical discussion. The areas of inquiry were as follows:

A. What is the relationship between couple cognitive style match and mismatch and their perception of their relationship structure?

1. What is the relationship between couple cognitive style match and mismatch and their perception of their marital cohesion?

2. What is the relationship between couple cognitive style match and mismatch and their perception of their marital adaptability?

3. What is the relationship between couple cognitive style match and mismatch and their perception of their ideal cohesion?

4. What is the relationship between couple cognitive style match and mismatch and their perception of their ideal adaptability?

B. What is the relationship between couple cognitive style match and mismatch and selected marital problem solving interaction variables?

1. What is the relationship between couple cognitive style match and mismatch and the amount of interaction?

2. What is the relationship between couple cognitive style match and mismatch and the distribution of the interaction?

3. What is the relationship between couple cognitive style match and mismatch and the phasing of the interaction?

C. What is the relationship between couple cognitive style match and mismatch and their perception of their marital problem solving effectiveness?

1. What is the relationship between couple cognitive style match and mismatch and their perception of the quality of their solutions?

2. What is the relationship between couple cognitive style match and mismatch and their satisfaction with their solutions?

3. What is the relationship between couple cognitive style match and mismatch and their satisfaction with the problem solving process?

CHAPTER IV

METHOD

Participants

The Selection Method

Four married couples were selected by contacting a number of churches, one liberal arts college, and the author's personal social network within a large Western Canadian city. In order to qualify for the study, couples had to be married between one and five years. In addition, it was stipulated that they could not have been involved in marriage counselling within the past twelve month period nor intend to be at the time of the study. Whether or not the couples had children was not a criterion. The four couples were selected for the study on the basis of their cognitive style, using the group form of the Embedded Figures Test (G.E.F.T.) to measure their level of field dependence/independence. In order to arrive at the final four couples, a total of 19 couples was tested from among the greater population. Results of the G.E.F.T. scores for these 19 couples (see Table 1) indicated that the mean scores for both males and females were slightly higher than those of the liberal arts college norm group cited in the G.E.F.T. manual (Witkin, Oltman, Rankin, & Karp, 1971). Consistent with sex differences usually obtained with the Embedded Figures Test, men performed slightly higher on the test than women.

In order to identify those individuals who were either field dependent or field independent, individual scores as determined by the

Table 1

Group Embedded Figures Test Scores for 19 Couples

Couples	Husband	Wife	Difference (Husband-Wife)
1	18	17	1
2 (FIH-FDW)	17	1	16
3	12	17	-5
4	18	4	14
5	18	16	2
6	15	16	-1
7	2	13	-11
8 (FDH-FIW)	8	16	-8
9	15	17	-2
10	13	11	2
11	11	15	-4
12	10	14	-4
13	12	17	-5
14	17	12	5
15	2	12	-10
16 (FDH-FDW)	12	3	9
17 (FIH-FIW)	18	17	1
18	17	18	-1
19	16	5	11
Range	2 - 18	1 - 18	
$\overline{X}$	13.2	12.68	

number of correct answers obtained on the G.E.F.T. were compared with available norm scores provided by the G.E.F.T. manual (Witkin et al., 1971). Those individuals whose scores fell within the first quartile were considered to be field dependent and those whose scores were within the fourth quartile were considered to be field independent. The final selection consisted of four couples with each couple representing one of the four possible combinations of cognitive styles: (a) husband and wife both field dependent, (b) husband and wife both field independent, (c) husband field independent with wife field dependent, and (d) husband field dependent with wife field independent (see Table 1).

General Description of the Participants

Of the four couples who participated in this study, three couples included individuals whose G.E.F.T. scores placed them within the original criterion used to measure field dependence or field independence (see Table 2). The husband in couple one (FDH-FDW) did not meet criterion, but since there was difficulty finding a couple for this category it was decided that his score could be accepted as an indication of field dependence. This decision was based on the fact that his G.E.F.T. score was below the mean score for the group of 19 couples. In comparison to the other field dependent participants whose scores on the G.E.F.T. fell within the first quartile of the norm group distribution, this individual's score placed him within the second quartile.

The G.E.F.T. scores, WAIS-R vocabulary scaled scores and general information about the demographic data of the chosen couples are

Table 2

Demographic Data of Couples

Characteristics	Couple 1		Couple 2		Couple 3		Couple 4	
	HFD	WFD	HFI	WFI	HFI	WFD	HFD	WFI
G.E.F.T. Scores (# correct)	12	3	18	17	17	1	8	16
WAIS-R Vocabulary								
Scale Scores	10	8	10	9	9	8	10	10
Raw Scores	47	40	47	46	43	38	51	50
Age	27	27	23	23	24	24	34	31
Formal Education	U.Degree	U.Degree	Grade12	Grade12	Grade12	Grade12	Grade12	Grade12
Occupation	Teacher	Home-maker	Skilled Trade	Home-maker	Skilled Trade	Home-maker	Skilled Trade	Home-maker
Years married	3		2		4		5	
Number of children	0		1		1		1	
Age of children	-		3.5 months		3.5 months		12 months	

listed in Table 2. The mean age of the sample was 26.63 years ranging from 23 to 34 years. The average length of marriage for the four couples was 3.5 years ranging from two to five years. With respect to age and length of marriage, couple four was slightly older and had been married the longest. Couple one is distinct from the group in that both have more education than any of the other individuals included in the study. They also were the only couple who did not have a child. Finally, it is significant to note that the mean score on the WAIS-R Vocabulary scale was 9.25 with a range of 8 to 10. These scores are all within the average range on the vocabulary scale ($\overline{X}$ = 10; SD = 3).

Materials

The following measures were used in this study: (a) the Group Embedded Figures Test to measure cognitive style; (b) the vocabulary scale of the Wechsler Adult Intelligence Scale, Revised Edition (Wechsler, 1981); (c) FACES II as a test of marital cohesion and marital adaptability (Olson, Portner, & Bell, 1982); (d) the consensus component of the Dyadic Adjustment Scale (Spanier, 1976); (e) the Marital Interaction Coding System (Weiss & Summers, 1984); and (f) a problem solving questionnaire.

The Group Embedded Figures Test

The Group Embedded Figures Test was developed as an adaptation of the original individually administered Embedded Figures Test. The purpose of the group test was for ease of administration with many persons. The Group Embedded Figures Test is designed to resemble the

Embedded Figures Test as closely as possible. Like the Embedded Figures Test, the Group Embedded Figures Test measures an individual's competence at perceptual disembedding, which is an ability related to field dependence/independence. The test appears in a booklet form which each subject is required to have. The booklet contains explicit instructions and examples of the required task performances. Following the instruction section, the booklet is divided into three separate sections. Each section contains a series of complex geometric figures. Over all three sections, 17 of the 18 complex figures of the Embedded Figures Test are used. In the first section there are seven relatively easy complex figures. The second and third sections of the booklet each contain nine complex figures of greater difficulty. On the back cover of the booklet are printed eight simple geometric forms, each one identified by a letter from A to H. Different ones of these simple forms are embedded within each of the complex figures. The task confronting the subject is to work through each test section separately by locating the requested simple form that is embedded within each complex design. For example, the first task in the first section consists of a complex geometric figure with the instructions stating, "Find Simple Form B" (Group Embedded Figures Test booklet, p. 5). The subject first turns to the back cover to identify Form B, then turns back to the first question and attempts to locate Simple Form B. When he/she is certain of its location, the Simple Form is traced and the subject moves on to question two.

The Group Embedded Figures Test is a timed test that requires strict administration procedures. Participants are required to have a test booklet and a couple of pencils with erasers. When directions have been read and understood and practice questions completed, then the participants begin the first section when signalled by the instructor. Two minutes are provided to complete section one and five minutes for each of the last two sections. When the alloted time for each section is gone, subjects are asked to stop working on that section and to turn to the next section and begin when the timer is ready.

Since section one is considered to be a practice section, scoring is determined by the total number of simple forms correctly traced in the combined second and third sections of the test booklet. Available norms for the Group Embedded Figures Test are based on men and women college students. Men in the first quartile scored 0 - 9 correct while women scored 0 - 8. Men in the fourth quartile scored 16 - 18 correct while women scored 15 - 18. The male mean score was 12.0 with a standard deviation of 4.1. For females the mean score was 10.8 with a standard deviation of 4.2. Consistent with sex differences usually found with the Embedded Figures Test, men in the norm group performed higher than women. Although the differences are slight, they were found to be statistically significant at the $p < .005$ level (Witkin, Oltman, Raskin, & Karp, 1971).

The Group Embedded Figures Test has been found to be a valid measure of field dependence/independence given its reasonably high correlation with the Embedded Figures Test. The Group Embedded Figures Test correlates with the Embedded Figures Test at .82 for males and .63 for females. Other measures for evaluating the validity of the Group Embedded Figures Test have included the portable rod and frame test and the degree of articulation of the body concept applied to human figure drawings; both of which are considered to be measures of psychological differentiation. Although correlation between the Group Embedded Figures Test and the portable rod and frame test are quite low (.39 for men and .34 for women), they are considerably higher in the case of the Group Embedded Figures Test and the articulation of the body concept (.71 for men and .55 for women).

Since the validity of the Group Embedded Figures Test to an extent is related to its parent form, the Embedded Figures Test, a discussion of the validity of that test is in order. The field dependence/independence perceptual style has been found to be related to perceptual tendency theory in studies where significant correlations were found between Embedded Figures Test scores, Rod and Frame Test scores, and Articulated Body Test scores (Gardner, 1957; Jackson, 1955, 1958; Newbigging, 1954; Perez, 1955). In addition, high correlations have been found between the Embedded Figures Test and both tactile and auditory disembedding tasks (Axelrod & Cohen, 1961; White, 1954; Witkin, Lomonaco, Birnbaum, Lehr, & Herman, 1968). Similar concepts to the field dependence/independence measure determined by the Embedded Figures Test have been identified in factor analytic studies. Two of the more widely recognized of these concepts are Guilford's adaptive, flexibility dimension (1952, 1955a, 1955b, 1957) and Thurston's flexibility of closure dimension (1944).

One important qualifying factor concerning the E.F.T. is that, although it is related to performances that require perceptual disembedding, it is not related to perceptual situations that do not involve the disembedding component (Karp, 1963). In other words, competence on the E.F.T. requires not only the ability to discriminate the parts of a field from its contextual organization but also the ability to break up or restructure the organized field in order to isolate its various component parts.

Another qualifying factor regarding the Embedded Figures Test is that performance on the E.F.T. is not related to intellectual tasks that do not include a disembedding requirement. For example, scores on the E.F.T. were found to load on the analytical factor of the Wechsler Intelligence Scale for Adults and for Children but they did not load on either the verbal - comprehension or attention - concentration factors (Goodenough & Karp, 1961; Karp, 1963). The analytic factor of the WAIS is comprised of the block design, object assembly, and picture completion subtests. Since performance of these subtests requires similar perceptual abilities to those required for performance on the E.F.T., field independent individuals have been found to score higher on this component of the WAIS than do field dependent individuals. The other two components of the WAIS which measure intelligence without a disembedding requirement do not discriminate a field dependence/independence orientation. The evidence to date has indicated that the E.F.T. indication of the field dependence/independence orientation is not a measure of general intelligence as indicated by the WAIS score (Robinson, 1983).

The Wechsler Adult Intelligence Scale, Vocabulary Subtest

It is known that subtests of the WAIS can be used either independently or in any number of combinations (Zimmerman & Woo-Sam, 1973). Furthermore, as Zimmerman and Woo-Sam have stated, "Vocabulary is generally considered the best single measure of general intelligence" (p. 107). Since a fairly brief, yet reliable, measure of intelligence was required for this study, the vocabulary subtest of the WAIS-R was selected. The vocabulary subscale correlates at .90 with the WAIS Verbal Scale and at .85 with the full scale. The standard error is .61.

The vocabulary subtest consists of 40 words which are listed in an estimated order of difficulty. These words represent a cross section of the various parts of speech including nouns, verbs, adjectives, and an adverb. The subject's task is to define audibly each word in order. A psychologist trained in the usage of the WAIS-R rates each definition on its level of difficulty and awards a score from 0 to 2. Upon test completion, test scores are summed and converted to scale scores. The norm group mean score for the vocabulary subtest is reported to be 10 with a standard deviation of three.

The vocabulary subtest is said to be an indicator of educational experiences as well as an individual's "sensitivity to new information and ideas and the ability to store and associatively regroup these as the occasion demands" (Zimmerman & Woo-Sam, 1973, p. 108). It has been determined that E.F.T. scores do not load on the WAIS verbal comprehensive factor (Goodenough & Karp, 1961). The importance of determining intelligence in this way was to eliminate the possibility that couple differences on various variables were related simply to intelligence rather than cognitive style.

Family Adaptability and Cohesion Evaluation Scales

The couple form of the Family Adaptability and Cohesion Evaluation Scales (FACES II) measures how individuals within the dyad perceive their relationship with respect to cohesion and adaptability (Olson et al., 1982). The FACES II instrument was the product of a factor analysis on the 50 items from a previous scale (FACES) that sought to measure the family cohesion and adaptability dimensions. The FACES II was reduced to a 30 item scale and includes 16 statements pertaining to cohesion and 14 statements pertaining to adaptability.

The FACES II adaptability scale consists of six concepts: assertiveness, leadership, discipline, negotiation, roles, and rules. Each of these concepts was measured by two or three questions about an individual's perception of that area. Assertiveness is a measure of an individual's perception of the freedom of the marital partners to express their opinions (e.g., "We freely say what we want"). Leadership is a measure of who controls in the relationship (e.g., "We each have major input regarding family decisions"). Discipline measures perceived fairness in the relationship (e.g., "We operate on the principle of fairness in our marriage"). Negotiation is measured in terms of compromise, problem discussion and exploration of new ways of handling problems (e.g., "We try new ways of dealing with problems"). Roles refers to the perception of responsibility sharing and exchange (e.g., "We shift household responsibilities between us"). Finally, rules are their perception as to whether or not rules are known and changeable (e.g., "It is hard to know what the rules are in our relationship"). In all, the adaptability score of FACES II includes a total of 14 statements categorized into these six areas.

The cohesion dimension of FACES II measures the perception an individual has of the degree of emotional closeness which he/she is currently experiencing or desires in the relationship. The cohesion dimension is understood to include the following eight concepts which appear on the FACES II scale: emotional bonding, family boundaries, coalitions, time, space, friends, decision making, and interests and recreation. Emotional bonding is measured in terms of closeness and support (e.g., "We are supportive of each other during difficult times"). Family boundaries deals with an individual's perception of the ease of communication with persons outside versus inside the relationship (e.g., "It is easier to discuss problems with people outside the relationship"). Coalition is measured as a tendency to function separately or autonomously. Time is measured from the perspective of time spent together. Space is measured as pertaining to the desirability and reality of proximity of family members (e.g., "We spend time together when we are home"). The friends subscale pertains to the sharing and approval of other members' friends. Decision making includes perception of joint consultation and cooperation with partner decision making. Interests and recreation measures perception of shared interests and joint acitivity (e.g., "We have difficulty thinking of things to do together"). In all, the cohesion dimension of FACES II includes eight concepts as measured by a total of 16 statements.

The format of the couple form allows for easy completion and scoring. The subject is asked to read a statement and then to indicate on a separate answer sheet their response. Response alternatives are on a five-point Likert-type scale that indicates a frequency rate for behaviours ranging from almost never to almost always. The scoring procedure for FACES II is clearly outlined in the answer sheet provided for the subjects. The range of scores for an individual is between 16 and 80 for cohesion and 15 to 70 for adaptability. Couple scores were determined by calculating a mean score for each couple based on individual partner scores. Norm groups provided for users of FACES II are family groups. Since only four or five items on the FACES II form have been changed by the authors to make it relevant for couples, the suggestion is that these norms are functional for couples as well (Olson, 1983). The norms are based on a total of 2,082 parents who participated in a national U.S. survey. The mean score for those couples included within this norm group is 64.9 with a standard deviation of 8.4 for cohesion and 49.9 with a standard deviation of 6.6 for adaptability. In addition to means and standard deviations, cutoff points are provided for plotting scores on a circumplex model grid with the cohesion dimension segmented across the top and the adaptability dimension segmented vertically. For each of the designations a cutoff score is suggested based on the norm group. Given the scoring procedure, it is possible to locate a couple on the circumplex model grid. This grid consists of 16 different types of families based on all of the possible combinations of cohesion and adaptability scores (see Figure 2).

Figure 2

Circumplex Model

ADAPTABILITY	Disengaged (56.9 or below)	Separated (57.0 - 65.0)	Connected (65.1 - 73.0)	Enmeshed (73.1 and above)
Chaotic (56.1 or above)				
Flexible (50.1 - 56.0)				
Structured (44.0 - 50.0)				
Rigid (43.9 or below)				

COHESION

Note: The FACES II Cutting Points for Couple Scores are located within the brackets.

In addition to the above procedure, FACES II can also be used as a measure of marital satisfaction by obtaining a perceived versus ideal discrepancy score. Individuals respond to the statements twice. First they indicate how they perceive the current situation and second they include how they would like things to be ideally. The smaller the discrepancy between the two scores, then, the greater the level of marital satisfaction. Also, this procedure affords the researcher an opportunity to record the direction of change which various individuals desire for their relationship.

Reliability statistics are available with respect to both internal consistency and test/retest. For the internal consistency, the Cronbach Alphas for the sample of 2,412 were .87 for the cohesion dimension, .78 for adaptability, and .98 for the total scale. On a test-retest reliability study using the longer 50 item version of FACES with a four to five week time lapse between the administration of the first and second test, the Pearson correlations were .83 for cohesion, .80 for adaptability, and .84 for the total scale.

The Dyadic Adjustment Scale

The Dyadic Adjustment Scale is a measure for assessing marital quality. It is a self administered questionnaire with a 32-item scale that measures four specific components of marital quality: dyadic consensus, dyadic satisfaction, dyadic cohesion, and affectional expression. The format requires that a subject read a statement and then indicate, by circling a number on a five-point Likert-type scale, the extent to which he/she agrees or disagrees with the statement.

In order to determine an area of marital disagreement that was salient to each of the four couples, the dyadic consensus component of the Dyadic Adjustment Scale was used in this study. The consensus component is comprised of 15 items that are fairly indicative of those standard areas of marital life in which there is potential for disagreement. The first five items of the 15 items are exemplary of the kinds of areas of marital life that are included in this subscale; these items refer to finances, recreation, religion, friends, and conventionality. It was expected that these items would be general enough that even in identifying an item of concern, couples might still need to disembed a specific problem from the general item context in order to work toward resolving their differences.

Instead of using the normal scoring procedure, the author chose four of the 15 items on the basis of whether couples agreed that this item was an area of disagreement or disagreed on whether the item was an area of disagreement. These four areas were used during the problem solving session.

Marital Interaction Coding System

The original Marital Interaction Coding Systems' (MICS) computer program was developed in order to analyze video taped couple interactions on the basis of code frequencies and stimulus-response relationships of husband and wife behaviours (Weiss & Wieder, 1979). Since the original MICS, the MICS-III has been developed in order to provide a more sophisticated analysis of interactions by adding a greater variety of descriptive data. For purposes of this study, the first ten minutes of the fifteen minute marital problem discussion by each of the four couples was sent to the Marital Studies Center located at the University of Oregon to be coded by professional MICS Coders. Each couple's problem solving session was coded for the verbal and nonverbal behaviour that occurred during their interaction. These behaviours were classified into 28 codes that describe 19 verbal and nine nonverbal discreet behaviours. An example of a discreet verbal behaviour unit would be the unit labelled "agree" (AG) and defined as occurring when one person expresses or advances an opinion and the response of the other person acknowledges that the two are in agreement. In an interchange where one person questions, "I think you have been putting in too much overtime, don't you?", a response of "yes" would be coded as agree. An example of a nonverbal behavioural unit would be a smile or a laugh coded simply as smile/laugh (SL). A behaviour unit, therefore, can be a gesture, a grunt, a word, words or a complete sentence. For ease in interpreting the coder's analysis, MICS provided a manual in which all behaviour codes were defined (Weiss & Wieder, 1979).

The 28 behaviour codes have been grouped into seven functional categories of behaviour (see Table 3). Data pertaining to each of the 28 behaviour codes and each of the seven a priori categories were presented in a variety of summary tables for each couple. The main tables utilized in this study were the Raw Code Frequency tables. On these tables were recorded the number of occurrences of each of the 28 behaviour codes over the ten minute period for the husband and the wife separately. By adding up the total number of behaviour code frequencies within each of the seven behaviour categories, total scores could then be determined for the major behavioural categories.

Table 3

MICS-III Functional Behavioural Categories

Behaviour Categories	Behaviour Codes
1. Irrelevant (X)	Normative (NO) Talk (TA)
2. Description (D)	Problem Description External (PE) Problem Description Internal (PI)
3. Blame (B)	Complain (CP) Criticize (CR) Mind-Read Negative (M-) Put Down (PU)
4. Propose Change (P)	Positive Solution (PS) Compromise (CS) Negative Solution (NS)
5. Validation (V)	Agree (AG) Approve (AP) Accept Responsibility (AR) Compliance (CO)
6. Invalidation (I)	Disagree (DG) Deny Responsibility (DR) Excuse (EX) Interrupt (IN) No Response (NR) No Compliance (NC) Turn Off (TO)
7. Facilitation (F)	Paraphrase/Reflection (PR) Mind-Read Positive (M+) Humor (HM) Positive Physical Contact (PP) Smile/Laugh (SL) Assent (AS)

From the information provided in the Raw Code Frequency tables, couple scores were determined by summing husband and wife totals for all of the 28 behaviour codes and the seven behaviour categories. For a sample of a Raw Code Frequency table printout utilized in this study, see Appendix A.

In addition to the Raw Code Frequency tables, Category Frequency Distribution histograms that presented data for each individual were used in the study. These provided the frequency of the behaviour codes that were exhibited for each of the behaviour categories. The code frequencies for each category were presented on the tables in such a manner as to distinguish the number of code frequencies that occurred within each minute of the ten minute segment. The information provided in this table was based on the same codes and categories used in the Raw Code Frequency tables. They were calculated in the same manner as the data in the Raw Code Frequency table. This particular table enabled the tabulation of the results pertaining to the sequencing of interaction where it was necessary to see how the couples' interaction patterns changed over time. The Category Frequency Distribution histograms printouts utilized in this study are presented in Appendix B.

The Marital Interaction Coding System uses two trained professional coders. Previous studies utilizing the original version of the MICS provide detailed accounts of coder reliability (e.g., Margolin & Wampold, 1981). For the base rate reliability, interobserver agreement on the overall frequency of each behavioural code was considered. Interobserver correlations were computed separately for each of the 26 codes used in the aforementioned study. The mean interobserver correlation was .81 and 20 out of 26 codes produced correlations greater than .70. Four codes had correlations less than .70 and two did not allow for a relevant measure of reliability of coder observation since they did not occur during the taped interaction.

Marital Problem Solving Effectiveness Questionnaire

This questionnaire was developed by the author in order to ascertain each partner's perception of the video taping session with respect to certain issues. Firstly, it was expected that this questionnaire would be a measure of the respective partners' perception of their problem solving effectiveness during the video session. The first statement on the questionnaire assessed the individual partners' perception of four dimensions of their problem solving effort: solution suitability, solution satisfaction, effectiveness of the problem solving process, and satisfaction with the problem solving process. A second area of consideration on the questionnaire was the couples' perception of their problem solving effectiveness in general and so two questions were included, one pertaining to overall marital problem solving ability and the other to overall marital problem solving satisfaction. These were the major considerations within the questionnaire; however, other statements were included to add to the body of information gathered about each couple. These additional statements pertained to problem solving leadership (e.g., Who takes the initiative?) and style of leadership (e.g., Are problem discussion styles similar or different?). For all ten items, individuals were required to respond to the statement or question by circling a number on a seven-point Likert-type scale which corresponded with their extent of agreement or disagreement or another dichotomy (see Appendix C for a copy of the questionnaire).

Procedure

Each couple was seen on three occasions for a total of approximately three hours. During the initial contact, most of the couples were processed within a group situation that involved six to ten couples. A few of the couples could not attend a group session and so were met in their homes. During this initial session a brief explanation of the study was outlined both verbally and in a cover letter that was given to each person. After each person had signed an informed consent form, the group was administered the Group Embedded Figures Test. Following the selection of a final four couples, letters were sent to all the other participants to thank them and to inform them that they were not in the final selected group and, therefore, would no longer be involved in the study. Times were arranged to meet with each of the four couples chosen for the study. Couples were seen separately from this point on in the study. On the second contact, several tests were administered in the couples' homes. First a certified psychologist, Glennis Mowatt, administered the WAIS-R vocabulary test with one of the marriage partners in one room while the researcher had the other partner complete the FACES II couple form and the consensus subscale of the Dyadic Adjustment Scale in a separate room. The FACES II couple form was completed two times by each partner. On the first completion, he/she answered the questions from the perspective of "this is how things are currently". On the second completion they answered the questions from the perspective of "this is how I would like things to be ideally". When both partners had completed their assigned tasks they switched rooms and tasks. In most cases this total procedure required a little over sixty minutes.

Between the second and third meetings with the four couples, the information provided by the consensus subscale of the Dyadic Adjustment Scale was reviewed in order to arrive at four areas of potential marital disagreement for each couple. These four potential problem areas were required for the couple problem discussion session during the third meeting.

The third meeting took place at a university video laboratory. Couples had been scheduled for separate one-hour appointments. When they arrived they were seated in front of the video camera. In order to maintain consistency among all four couples, the video taping session instructions were read to the couples. In essence the instructions included three steps. Couples were told that they would be handed a paper on which four possible problem areas were identified. They were told that the selection of the four problem areas was based on their responses to the consensus component of the Dyadic

Adjustment Scale. They were to independently look over these for 60 seconds and, without discussion, decide what might be the most current area of disagreement in their marriage. After 60 seconds they were told that they had 15 minutes in which to agree on a specific area of disagreement and to discuss the problem with a view to resolving the disagreement. After giving them a specific example the instructions were repeated. After a brief pause to entertain questions the couples were told to begin and they were timed from that point for a 15 minute period. (See Appendix D for a complete copy of instructions.) Immediately following taping, the partners independently completed the problem solving effectiveness questionnaire. They were not observing the videotape while they were completing the questionnaire. This was followed by a debriefing period and then each person signed an informed consent form to cover the use of the video taping session. Each couple was informed that after coding was completed all tapes would be erased. Couples were also informed that, upon study completion, they would be notified and could discuss general findings with the author.

Design

An exploratory study method was appropriate for this study. It is an approach which permits an extensive, in-depth analysis of participants which is usually not feasible in a large sample study. The purpose of such a methodology is the discovery of relationships among variables and the gaining of data from which current ideas can be elaborated and hypotheses generated. The limitation of the exploratory study approach is that the results do not test hypotheses and cannot be tested with inferential statistics. In addition, it is not possible to generalize to a larger sample.

CHAPTER V

RESULTS

In discussing the results of this four couple study, an overview of the results for each couple will be presented initially. The specific results of the various measures will be presented later in relation to the various research questions.

Four Couple Types of Cognitive Style Match/Mismatch

Couple One (FDH-FDW)

On most of the categories measured that are considered to be positively related to problem solving effectiveness, couple one (field dependent husband - field dependent wife) results placed them second lowest of the four couples. When their own assessment of their problem solving effectiveness and satisfaction was compared with the other couples through self report, they ranked the second least effective and the second most dissatisfied. While couple one was the most satisfied with the degree of cohesion in their relationship, they were second most dissatisfied with the level of adaptability. Of final note, couple one appeared to have greater difficulty than the other couples with the problem discussion. In viewing couple one's video session for general impressions, the author observed couple one as less focused than the other couples in that they were the only couple of the four to discuss six problems within the time allotted.

Couple Two (FIH-FIW)

Couple two (field independent husband - field independent wife) reported themselves to be the least effective out of the four couples on problem solving effectiveness. They also rated themselves as the lowest on many of the variables related to problem solving effectiveness. In relation to marital cohesion they scored the lowest of the four couples and were the least satisfied of the four with this dimension of their marital relationship. The same result was evidenced in regard to their perception of their adaptability. Interaction results overall indicated that couple two, along with couple one, tended to exhibit a greater number of negative behaviours than couples three and four. Unique to couple two was a higher number of paraphrasing statements than the other couples. In regard to the problem discussion, couple two was observed to be similar to couples three and four in that they adopted a structured approach. Couple two was the only couple to exhibit meta-communication about the problem solving process (e.g., "We're on a tangent").

Couple Three (FIH-FDW)

Couple three (field independent husband - field dependent wife) rated themselves as the second most effective of the four couples on perceived problem solving effectiveness. Results indicated that they were within the middle range both in the perception of their cohesion and adaptability and in their satisfaction with these two dimensions. Couple three was most noticeably different from the other couples in relation to their interaction behaviours. Results indicated that they demonstrated the least amount of communication overall, the least amount of positive interactions, and the second fewest negative interactions. Similar to couple one, the wife in this dyad asked considerably more questions than her husband. The problem discussion was characterized by an interaction style marked by the wife questionning and the husband responding. Couple three was the only couple to actually propose solutions to their problem and to agree to take certain action steps following discussion.

Couple Four (FDH-FIW)

In general, the results for couple four (field dependent husband - field independent wife) indicated that out of the four couples they most frequently appeared to demonstrate behaviours that are conducive to effective problem solving. Compared with the other couples, couple four rated themselves as the most effective at arriving at problem solutions and the most satisfied with their results. They perceived their relationship structure as functioning at the most satisfying level of adaptability when compared with the other couples and were a close second to couple one in assessing their marital cohesion as being at an ideal level. In regard to some of the interaction measures it was noted that couple four had the greatest total amount of interaction of the couples. Within this broad category they also demonstrated the greatest amount of positive communication behaviours and the least amount of negative communication behaviours. Upon observing couple four's problem discussion, it was noted that the wife was instrumental in structuring the discussion as indicated by her problem descriptive behaviours and her summary remarks.

Couple Type (Cognitive Style Combinations) and Marital Cohesion, Adaptability

In order to compare couples on their perception of marital structure variables, mean scores were determined for each couple from individual scores on the FACES II measure of marital cohesion and adaptability (see Table 4). The couple mean scores were computed for both actual and ideal cohesion and adaptability and then subtracted to determine actual/ideal discrepancies. These discrepancies were indicators of each couple's satisfaction with the level of their cohesion and adaptability. Norm group means and standard deviation for FACES II are used throughout the following discussion of FACES II results.

Marital Cohesion Results

The sample mean of actual cohesion score of 63.75 is well within one standard deviation (SD = 8.4) of the FACES II norm group mean score of 64.9. With the exception of couple two, all the couples perceived their relationship as being within the "connected" range of cohesion. This level of marital functioning as stated earlier is said to be a moderate level (Olson et al., 1979). Mainly due to the husband's score, couple two scored much lower than the other couples and was almost two standard deviations below the mean score for all four couples and the norm. The results of the score couple two obtained on the marital cohesion dimension indicate that they perceive their relationship as functioning at a "disengaged" level. Couple two had the greatest husband-wife difference in perception of actual cohesion and couple four had the least.

When actual cohesion was compared with ideal cohesion, it was indicated that couple two had the greatest actual/ideal discrepancy, which indicates that they appear to be the most dissatisfied of the

Table 4

Individual and Couple Mean Scores
For Cohesion and Adaptability

Subjects	Cohesion						Adaptability					
	Actual		Ideal		Difference		Actual		Ideal		Difference	
	H	W	H	W	H	W	H	W	H	W	H	W
Couple 1 (FDH-FDW)												
Individual Score	70	64	72	70	+ 2	+ 6	54	51	70	64	+16	+13
$\overline{X}$ Score	67.0		71.0		4.0		52.5		67.0		14.5	
Couple 2 (FIH-FIW)												
Individual Score	41	58	65	70	+24	+12	46	42	62	62	+16	+20
$\overline{X}$ Score	49.5		67.5		18.0		44.0		62.0		18.0	
Couple 3 (FIH-FDW)												
Individual Score	70	65	77	78	+ 7	+13	62	51	69	69	+ 7	+18
$\overline{X}$ Score	67.5		77.5		10.0		56.5		69.0		12.5	
Couple 4 (FDH-FIW)												
Individual Score	72	70	72	79	0	+ 9	65	56	64	66	-1	+10
$\overline{X}$ Score	71.0		75.5		4.5		60.5		65.0		4.5	
$\overline{X}$ for H/W	63.25/64.25		71.5/74.25		8.25/10.0		56.75/50.0		66.25/65.25		9.5/15.25	
$\overline{X}$ for couples	63.75		72.88		9.13		53.38		65.75		12.38	

couples with their marital cohesion. Couple one appeared to be the most satisfied with the marital cohesion, although couple four was very close. Of final note is the point on the cohesion continuum where the four couples ideally would like to be. Couples one and two would like their cohesion to function at the connected or moderate level. Couples three and four have indicated by their scores that they would like to be functioning at an extreme "enmeshed" level. This indicates that those couples with a matched cognitive style would desire a more moderate level of cohesion than couples with a mismatched cognitive style who would desire an extreme level of cohesion. The two couples in which there was a field dependent husband came the closest to functioning at their perceived ideal level of cohesion.

In comparing the two couples who were least satisfied with their level of marital cohesion it was observed that the field dependent wife in couple three appeared to be as dissatisfied with the level of cohesion in her relationship as the field independent wife in couple two. The difference between these two wives was indicated in the results that showed that the field dependent wife desired an ideal extreme level of cohesion in her relationship whereas the field independent wife desired an ideal moderate level of cohesion in hers.

In comparing sex differences with psychological differentiation (see Table 5) the results showed that the field dependent husbands were the most satisfied with the actual level of marital cohesion. In general the field dependent individuals were more satisfied with their marital cohesion than were the field independent individuals. The

Table 5

A Comparison of Sex by Psychological Differentiation for Marital Cohesion Scores

Actual Cohesion

	Field Independent	Field Dependent	$\overline{X}$
Female (Wives)	64.0	64.5	64.25
Male (Husbands)	55.5	71.0	63.25
$\overline{X}$	59.75	67.75	

Ideal Cohesion

	Field Independent	Field Dependent	$\overline{X}$
Female (Wives)	74.5	74.0	74.25
Male (Husbands)	71.0	72.0	71.50
$\overline{X}$	72.75	73.0	

Ideal - Actual Discrepancy

	Field Independent	Field Dependent	$\overline{X}$
Female (Wives)	+ 10.5	+ 9.5	+ 10.0
Male (Husbands)	+ 15.5	+ 1.0	+ 8.5
$\overline{X}$	13.0	5.25	

field dependent individuals also perceived their relationships to be more cohesive than did the field independent individuals. With respect to the actual cohesion scores, the results indicated that the difference between mean cohesion scores for husbands and wives was less than the difference between the scores for field independents and field dependents. This was not the case when ideal cohesion scores were considered. The psychological differentiation mean score difference was less than the sex mean score difference in this case. The wives desired a higher level of marital cohesion than the husbands.

Marital Adaptability Results

The study overall mean adaptability score of 53.38 is slightly higher than the FACES II test norm mean score of 49.9 but still within one standard deviation (SD = 6.6). The results of couple actual test scores are as follows: (a) Couple three and four are at the "chaotic" extreme level, (b) couple one is at the moderate "flexible" level, and (c) couple two is at the moderate "structured" level. Couple four scored a little more than one standard deviation above the norm group mean and couple two scored slightly more than one standard deviation below the norm group mean. The greatest difference for husband-wife perception of the marital adaptability was for couples three and four. The wives in both couples saw their adaptive level as flexible while their husbands perceived it to be at a chaotic level.

When actual adaptability scores are compared to ideal scores, couple two has indicated the greatest amount of discrepancy. They are followed by couple one. Couple four has the least discrepancy in their actual/ideal scores. For all the couples, ideal adaptability scores place them at the extreme "chaotic" level of marital functioning. The indications are that the couples with matched cognitive styles perceived their actual adaptability level as being at a moderate level while the couples with a mismatched cognitive style perceived their actual adaptability level as being high. Ideally, all four couples desired an extreme level of adaptability. The two couples with matched cognitive styles desired the greatest amount of change in the direction of more adaptability and the two couples with field dependent wives desired the greatest amount of adaptability.

In a similar manner to the cohesion results, when the mean adaptability scores for sex and differentiation groupings were compared, the field dependent husbands were the most satisfied with their marital adaptability (see Table 6). In general, the wives of both psychological differentiation groupings were the least satisfied. With respect to actual adaptability scores, the difference between mean adaptability scores for husbands and wives was greater than the difference between mean adaptability scores for field dependence and independence. The field independent participants perceived their marital relationships as less adaptive than the field dependent participants as did the females in comparison to the males.

In considering both cohesion and adaptability results, it appears that couple four (FDH-FIW) was the most satisfied with their actual levels of cohesion and adaptability and that couple two (FIH-FIW) was the least. Couple three (FIH-FDW) was moderately satisfied when compared to couples two and four. Couple one (FDH-FDW) was satisfied with their level of cohesion but dissatisfied with their level of

Table 6

A Comparison of Sex by Psychological Differentiation for Marital Adaptability Scores

Actual Adaptability

	Field Independent	Field Dependent	$\overline{X}$
Female (Wives)	49.0	51.0	50.0
Male (Husbands)	54.0	59.5	56.75
$\overline{X}$	51.5	55.25	

Ideal Adaptability

	Field Independent	Field Dependent	$\overline{X}$
Female (Wives)	64.0	66.5	65.25
Male (Husbands)	65.5	67.0	66.25
$\overline{X}$	64.75	66.75	

Ideal - Actual Discrepancy

	Field Independent	Field Dependent	$\overline{X}$
Female (Wives)	+ 15.0	+ 15.5	+ 15.25
Male (Husbands)	+ 11.5	+ 8.5	+ 10.0
$\overline{X}$	13.25	12.0	

adaptability. In other words, it would appear that the couples with mismatched cognitive styles were more satisfied with their level of adaptability than were the matched couples. A different result was evident with cohesion in that the matched field dependent couple and the mismatched couple with the field dependent husband were the most satisfied. For both variables, sex differences were evident in that the wives desired a greater increase of both cohesion and adaptability than the husbands. This was particularly evident with respect to adaptability where it was noted that the wives in general perceived their relationships as being less adaptive than did the husbands. Whereas both husbands and wives appeared to agree on an ideal level of adaptability, the wives preferred a higher level of cohesion. When sex differences were compared to psychological differentiation, mean score differences were greater for psychological differentiation in relation to actual cohesion whereas mean score differences were greater for sex differences in relation to actual adaptability. In both cases the field independent mean scores were lower than the field dependent mean scores, which indicates that the field independent participants perceived their marital relationships as less cohesive and adaptive than the field dependent participants.

Couple Type and Marital Problem Solving Interaction Variables

To explore differences among the four couple types, couples have been analyzed in two ways: (a) Couples were compared on the basis of their marital unit scores which were determined by summing husband and wife scores for each behavioural code; and (b) couple profiles based on a particular combination of husband and wife interaction scores were compared. The raw data representing these couple interaction scores is presented in the Marital Interaction Behaviour Category Frequency table (see Table 7). This table presents the total frequency of occurrence of each behaviour code within the first ten minutes of the problem discussion session for each individual and each couple. These 28 behaviour codes were grouped into seven major behaviour categories and summed with respect to the total frequency of occurrence of the behaviour codes within each of the seven major behaviour categories. These summary scores are available for each husband, wife, and couple.

Amount of Interaction

The total amount of interaction included the summing of the 28 behaviour codes from all seven major behavioural categories. These categories included a total of 9 nonverbal and 19 verbal behaviour codes. The mean score for the four couples was 147.75 and the scores ranged from 105 to 177. Couple four, the one with the greatest satisfaction in cohesion and adaptability, also had the greatest amount of overall interaction of the four couples and couple three had the least. The difference between these two couples was 7.2 communication behaviours per minute.

In addition to general amount of communication, certain behavioural categories were clustered into the classifications of positive interaction and negative interaction. Amount of positive interaction scores were determined by summing couple behaviour code

Table 7

Frequency of MICS Categories for Four Couples

Behaviour Category		Couple 1 (FDH-FDW)			Couple 2 (FIH-FIW)			Couple 3 (FIH-FDW)			Couple 4 (FDH-FIW)		
		H	W	T	H	W	T	H	W	T	H	W	T
Irrelevant													
Normative	NO	0	1	1	1	0	1	0	2	2	0	0	0
Talk	TA	4	1	5	1	2	3	0	0	0	6	6	12
		4	2	6	2	2	4	0	2	2	6	6	12
Description													
Prob.Des.E.	PE	1	0	1	3	1	4	6	11	17	0	0	0
Prob.Des.I.	PI	46	37	83	41	52	93	31	39	70	33	36	69
		47	37	84	44	53	97	37	50	87	33	36	69
Blame													
Complain	CP	1	2	3	0	0	0	0	0	0	0	0	0
Criticize	CR	0	1	1	5	1	6	0	0	0	0	0	0
Mind Read	M-	2	0	2	0	0	0	1	1	2	2	0	2
Put Down	PU	0	1	1	0	0	0	0	0	0	0	0	0
		3	4	7	5	1	6	1	1	2	2	0	2
Propose Change													
Positive Sol.	PS	4	3	7	2	2	4	0	0	0	3	4	7
Compromise	CS	0	0	0	0	0	0	0	0	0	0	0	0
Negative Sol.	NS	0	1	1	0	0	0	0	0	0	0	0	0
		4	4	8	2	2	4	0	0	0	3	4	7
Validation													
Agree	AG	3	1	4	7	6	13	4	0	4	16	18	34
Approve	AP	2	0	2	0	0	0	0	0	0	5	1	6
Accept Resp.	AR	0	0	0	0	0	0	0	0	0	0	0	0
Compliance	CO	0	0	0	0	0	0	0	1	1	0	0	0
		5	1	6	7	6	13	4	1	5	21	19	40
Invalidation													
Disagree	DG	1	3	4	3	3	6	0	0	0	0	1	1
Deny Resp.	DR	0	0	0	0	0	0	0	0	0	0	0	0
Excuse	EX	0	0	0	0	0	0	0	0	0	0	0	0
Interupt	IN	2	4	6	0	0	0	0	0	0	0	0	0
No Response	NR	0	1	1	0	0	0	0	0	0	0	0	0
No Compliance	NC	0	0	0	0	0	0	0	0	0	0	0	0
Turn Off	TO	0	0	0	0	0	0	0	0	0	0	0	0
		3	8	11	3	3	6	0	0	0	0	1	1
Facilitation													
Paraphrase	PR	1	0	1	6	3	9	0	0	0	1	1	2
Mind Read +	M+	1	0	1	0	0	0	0	0	0	0	0	0
Humor	HM	0	2	2	1	2	3	0	0	0	1	1	2
Pos.Phy.Cont.	PP	0	0	0	0	0	0	0	0	0	0	0	0
Smile/Laugh	SL	7	8	15	5	4	9	2	1	3	3	1	4
Assent	AS	1	9	10	4	3	7	5	1	6	17	21	38
		10	19	29	16	12	28	7	2	9	22	24	46
Grand Total		76	75	151	79	79	158	49	56	105	87	90	177

frequency scores within the following behaviour categories: problem description, proposal for change, validation, and facilitation. Amount of negative interaction was determined by summing couple behaviour code frequency scores within the categories blame and invalidation (see Table 8).

Table 8

A Rank Ordering of Couples

By Amount of Positive and Negative Interaction

		Amount of Positive Interaction		Amount of Negative Interaction	
Rank		Couple #	Amount	Couple #	Amount
Least	1	3	101	3	2
	2	1	127	4	3
	3	2	142	2	12
Greatest	4	4	162	1	18
		Range = 101 - 162 $\overline{X}$ = 133		Range = 2 - 18 $\overline{X}$ = 11.6	

In both categories, couple three exhibited the least number of behaviour codes. Again couple four had the greatest number of positive behaviour codes and the second fewest negative behaviour codes. Having stated the more general results, the specific categories will be considered as well as any behaviours within categories of note.

Problem Description. Within the category referred to as problem description, couple four, who had the most overall behaviour codes and the most positive behaviour codes, had the least number of codes, 28 fewer than couple two who had the greatest number in this category. Also of note, couple three who had the least number of codes overall had the second highest number of codes in the problem description category. A very high percentage (82.5%) (see Appendix) of couple three's total number of communication behaviours consisted of behaviours coded as problem description.

Propose Change. Couple one exhibited the greatest number of behaviours in this category followed by couple four. Within the category, both couples exhibited the behaviour code "positive solution" a total of seven times.

Validation. Validation is the behaviour category that would appear to be a measure of positive support in that it includes such supportive behaviours as agree, approve and comply. Couple four had 40 behaviours within this category, considerably more than the overall mean of 16 and 35 more than couple three, who had the least number of validation behaviours. Couple two had a moderate number of validating behaviours when compared with couples one and three. Within this category, couple four had the highest number of "agree" behaviours, 34, and the highest number of "approve" behaviours, 6.

Facilitation. Couple four again had the highest total of behaviours in the facilitation category and couple three the least. Within the category couple two exhibited 9 paraphrase behaviours, considerably more than any of the other couples. Couple one (15) followed by couple two (9) had the highest total of smile/laugh behaviours. Couple four had the highest number of assent behaviours, 28 more than couple one, who had the second highest number.

Blame. The greatest number of blaming behaviours were shown by couple one while couples three and four had the fewest. Within this category, couple one was the only couple to exhibit "complain" behaviours (3). Couple two had the highest number of "criticize" behaviours; however they were the only couple not to "negative mind-read".

Invalidation. Couple one followed by couple two had the highest number of behaviours in this category. For couple one, most of these behaviours were classified as either "disagree" or "interrupt". For couple two, most of these behaviours were classified as "disagree".

In summarizing the amount of interaction, couple four had the greatest amount of communication behaviour overall as well as the highest number of positive and supportive behaviours. In fact, when raw code frequencies are converted into percentages, it is apparent that agreement and assent behaviours made up about 48% of their total communication behaviours. Couple one and couple two had more negative communication behaviours than couples three and four. The results for couple four are not surprising when they are related to the cohesion and adaptability results. Couple four's high cohesion and adaptability as well as their satisfaction with both of these marital structure dimensions would appear to be congruent with their highly positive and supportive marital interaction results. It is interesting to note that couple one, who were the most satisfied with their cohesion though dissatisfied with their marital adaptability, appeared to vacilate on the placing of marital interaction scores.

While they demonstrated the greatest number of positive solutions and smile/laugh behaviours, they also demonstrated the greatest number of invalidating and blaming behaviours of the four couples. As might be expected couple two, who were the least satisfied of the four couples with their levels of marital cohesion and adaptability, were the most criticizing. On the other hand, couple two did demonstrate the second greatest number of validating behaviours and a fair number of facilitating behaviours. Most notable of these was couple two's use of their paraphrasing ability.

Couple Type and Distribution of Interaction

The results pertaining to the distribution of the interaction were determined by subtracting the frequency of occurrence of a particular behaviour code for the wife from her husband's. The four couples were then compared on the basis of their distribution of interaction profiles.

In considering first of all the distribution of overall interaction within couples, it was noted that all of the couple scores indicated a balance of interaction between husband and wife. Couple three revealed the largest difference (7) between the husband's total of 49 and the wife's total of 56.

For the category Problem Description, couple one alone indicated a situation in which the husband exhibited a greater number of problem description behaviours than his wife. For the remainder of the couples, the wife in each case demonstrated more problem description behaviours than her husband. For these three couples the greatest husband-wife differential was indicated by couples three and two, in that order. The differential between couple four's husband and wife problem description behaviours was quite small (2).

Results pertaining to the distribution of questioning behaviours indicated that the wives exhibited a greater number of questioning behaviours in all cases (see Table 9). For couple three this discrepancy was the largest of the couples. Furthermore the husband of couple three had fewer questioning behaviours than any of the other individuals while the wife had more. Couple four exhibited fewer questioning behaviours than any of the other three couples.

Table 9

Frequencies and Percentages of MICS Questioning Behaviours

	Couple One (FDH-FDW)		Couple Two (FIH-FIW)		Couple Three (FIH-FDW)		Couple Four (FDH-FIW)	
	H	W	H	W	H	W	H	W
Frequencies of Questioning Behaviour	16	20	16	20	2	25	5	7
Percentages of Questioning Behaviour	21	27	20	25	4	45	6	8

Evidence from the results pertaining to the behaviour category of Validation has indicated that for all four couples the husbands demonstrated a greater amount of validating behaviours than their wives. The greatest differentials in this respect were for couples one and three. In order to specify the nature of this validation, within-category behaviour frequency scores indicated that for couple one the husband exhibited agree and approve behaviours more often than his wife. For couple three, the husband demonstrated more agree behaviours than his wife. In couple four, the husband exhibited more approve behaviours than his wife.

Results from the behaviour category of Facilitation were mixed with couples one and four representing situations in which the wife had more frequent facilitation behaviours than the husband. For couples two and three the situation was the reverse. Within-category behaviour frequency differentials are helpful in this case in understanding the nature of the facilitation that occurred. For couple one the wife exhibited 12 times the number of assent behaviours as the husband. In couple three it was the husband who assented five times more often than the wife. In couple two, the husband demonstrated twice the frequency of paraphrasing behaviour as the wife.

These comments then encompass those interactional results deemed relevant to the marital problem solving variable of distribution of interaction. Other results that have contributed to an assessment of this variable were located in two separate instruments, FACES II and the marital problem solving effectiveness questionnaire. Couple scores for questions 4 and 16 on the FACES II form gave an indication of husband and wife perception of leadership or control in their relationship (see Table 10). According to these results, it was apparent that the couples with matched cognitive styles experienced balanced leadership in their relationship less often than the couples with mismatched cognitive styles. All four couples were similar in their decision making assessments.

Table 10

Couple Type and Perception of Marital Leadership

	Couple One (FDH-FDW)		Couple Two (FIH-FIW)		Couple Three (FIH-FDW)		Couple Four (FDH-FIW)	
	H	W	H	W	H	W	H	W
Equal Decision Making Input	5	4	3	5	4	5	5	5
$\overline{X}$	4.5		4.0		4.5		5.0	
Balanced Leadership	3	3	2	2	4	4	5	5
$\overline{X}$	3.0		2.0		4.0		5.0	

Note: The possible range of scores is from 1 to 5 where 1 signifies almost never, 3 signifies sometimes, and 5 signifies almost always.

Question three from the marital problem solving questionnaire gave some indication of couple perception of leadership with respect to problem discussion (see Table 11). Results here were varied. For couple one, the husband perceived an equalitarian approach to problem solving initiation while the wife perceived her husband as taking the initiative. Couple two were in agreement that the wife initiated problem solving. Couple three had different views with the husband perceiving both as initiators of problem discussion and the wife thinking that she took the initiative. Couple four were in agreement that they both initiated problem discussion.

Table 11

Couple Type and Perception of Marital Problem Solving Leadership

	Couple One (FDH-FDW) H	Couple One (FDH-FDW) W	Couple Two (FIH-FIW) H	Couple Two (FIH-FIW) W	Couple Three (FIH-FDW) H	Couple Three (FIH-FDW) W	Couple Four (FDH-FIW) H	Couple Four (FDH-FIW) W
Problem Solving Initiative	4	6	3	3	4	2	4	4
$\overline{X}$	5.0		3.0		3.0		4.0	

Note: The possible range of scores is from 1 to 7 where 1 signifies that the wife most often initiates problem solving and 7 signifies that the husband does. A score of 4 indicates that both initiate problem solving an equal number of times.

In comparing distribution of interaction results to previously discussed results, the following information was noted. The husband in couple one appeared to assume leadership in the relationship as indicated by a concentration of particular interactions. For example, the husband of couple one was the only husband of the four to have a greater amount of problem description behaviours than the wife. On the other hand, the wife in couple one asked more questions than the husband. She also gave assent twelve times more frequently than the husband. It was the wife's perception as well that the husband initiated problem solving discussion. In relating these findings to the other variables three things can be noted: (a) The couple desires greater adaptability; (b) the husband assumes the leadership; and (c) the wife's response is mixed as typified by her greater amount of assent, disagree, and complain behaviours. For couple two, who desired the greatest increase in both marital cohesion and adaptability, there was agreement that the wife initiated problem solving discussion more often than the husband and that leadership was balanced only occasionally. The distribution of couple two's interaction was fairly evenly balanced with two exceptions. For this couple the wife demonstrated more problem description behaviours than the husband and the husband demonstrated more frequent blaming behaviours than the wife.

While couple three perceived the leadership in their relationship as being balanced, the wife perceived herself as taking the problem solving initiative. Keeping in mind that couple three demonstrated the greatest percentage of problem description behaviours (82.5% of their total interaction), it can be noted that these behaviours were concentrated with the wife. Furthermore, it was indicated that the wife asked 25 questions as compared to two by the husband. The husband, on the other hand, demonstrated more validation and facilitation behaviours, most notably the specific behaviours of assent and agree.

Couple four, who was content with their cohesion and adaptability level, perceived their leadership as balanced and the husband as taking the initiative in problem solving discussion slightly more often than the wife. The fairly even distribution of the couple's interaction appears to be consistent with the other results that point to an equalitarian leadership style.

Couple Type and Phasing of Interaction

There were two ways of attaining descriptive data capable of contributing to an analysis of couple differences with respect to phasing of interaction. The first of these involved determining for each couple the average amount of problem description behaviours per minute for each of two five minute segments of the discussion. It was noted how couples differed when the frequency of problem description behaviour during the first five minutes of the interaction was compared with the frequency during the second five minutes (see Table12).

Table 12

Couple Types and Amount of Problem Description Behaviour

	Problem Description Behaviour (Amount/minute)	
Subjects	0 - 5 minutes	5 - 10 minutes
Couple 1	3.9	4.5
Couple 2	5.1	4.6
Couple 3	5.6	3.1
Couple 4	3.9	3.0

The results show that couples two, three and four all showed a decrease in the frequency of problem description behaviours during the second five minute period of interaction. (For a more in-depth view of these results, refer to Appendix A)

The second method for obtaining phasing interaction data involved the author's observations of the video tapes of couple interaction and making subjective observations about each couple's approach to structuring the problem discussion. A summary of observations made for each couple follows.

Couple One (FDH-FDW). Couple one agreed to discuss the topic "leisure" within the first 30 seconds of their discussion. Their discussion of this topic lasted for about seven minutes. Their definition of leisure seemed to be "doing things together" and the problem seemed to be more specifically focused on work versus leisure, although this was not explicitly stated. The husband appeared to initiate the problem solving structure; however, it was the wife who began the discussion and made the suggestion to switch topics after seven minutes. The ensuing discussion for the remaining eight minutes was quite random and simplistic. The topics of discussion changed six times within this time period. The issues covered went from habits to a discussion of an impending leisure activity to finances, then vacation, then back to the weekend, and finally to household tasks, which in itself was inclusive of three more separate issues. Only in one instance did couple one reach a conclusion and in that case the wife stated that she was complying under pressure. In terms of phasing of interaction, couple one exhibited a very random and unfocused approach to problem solving, as evidenced by the number of topic switches, and therefore showed no appearance of phasing.

Couple Two (FIH-FIW). Within the first two minutes and 30 seconds this couple set up the discussion, listed their alternatives and selected a topic which was "time spent together". From that point they described the problem more specifically as quality versus quantity of time together. After reviewing their relational history looking for helpful solution ideas, they came back to a problem definition. At this point the couple became sidetracked momentarily until the husband restructured the problem solving task by declaring, "We're on a tangent". Into the ninth minute the discussion included suggestions for possible solutions and an evaluation of the current situation. At the twelve minute point there appeared to be a mutual realization and agreement that another relationship problem required consideration since it appeared to impinge on the problem under discussion. The main discussion seemed to terminate at this point and from then on the discussion became diffuse. Basically, couple two's problem solving discussion appeared to have observable phases. The main sequence of interaction included topic choice, definition of the problem, reviewing relationship history for ideas, solution suggestions, evaluation, and problem redefinition.

Couple Three (FIH-FDW). Couple three chose the topic of religion and within fifteen seconds focused on the problem of child baptism. The observable phasing of couple three's interaction was unique compared with the other couples. This couple discussed their problem for four minutes and then the wife summed the decision making at that point and stated what action she would undertake as a result. The next three to four minutes was a repeat of the first four minutes with some topic expansion. Again, the wife summarized and stated intended action steps. This happened a third and final time concluding with the wife's summary and implementation proposal. Discussion concluded with agreement that they had dealt with the issue. The sequence of this interaction was basically problem discussion, possible solutions, summary, and action proposal. This sequence was repeated three times and each time new information was gathered and the issue further clarified.

Couple Four (FDH-FIW). Couple four took 30 seconds to select the topic of finances for discussion and another minute and a half to define their specific problem as budget priorities. Problem definition was followed by an evaluation of their current situation. After examining several dimensions of the problem, some attempt was made to make plans concerning one aspect of the problem. After twelve minutes the discussion became quite diffuse until the last minute, during which time the wife summarized the discussion. The problem interaction phasing that was evident during couple four's discussion included the following elements: problem selection, problem definition, prioritizing, planning, and summarizing.

In summary, the field dependent couple were the least able of the couples to structure their problem discussion and therefore were unable to get past the problem description phase. In a manner quite similar to their interaction behaviours, couple two's problem discussion was more complex than the other couples'. This was evidenced by the discernable phases in their problem solving and their meta-communication. By way of comparison with couple two, couple three's interaction was less complex but their phasing of the interaction was as structured. Couple three was the only couple to reach the phase of discussing solution implementation. While couple four's discussion was structured also and did move through discernable phases, these phases were more diffuse than they appeared to be during couple three's discussion.

Couple Type and Perception of Marital Problem Solving Effectiveness

In order to arrive at couple scores on perception of marital problem solving effectiveness, a mean score of the Likert scale results for each couple was assessed based on the partners' individual scores (see Table 13). Couple perception of four aspects of marital

Table 13

Couple Type and Perception of Problem Solving Effectiveness

	DIMENSIONS									
	Solution Ability		Process Ability		Solution Satisfaction		Process Satisfaction		$\overline{X}$	
	H	W	H	W	H	W	H	W	H	W
Couple 1 (FDH-FDW)	5	7	4	5	5	7	3	6	4.25	6.25
$\overline{X}$	6.0		4.5		6.0		4.5		5.25	
Couple 2 (FIH-FIW)	5	7	5	7	5	7	5	7	5.0	7.0
$\overline{X}$	6.0		6.0		6.0		6.0		6.0	
Couple 3 (FIH-FDW)	2	2	1	1	1	1	1	2	1.25	1.5
$\overline{X}$	2.0		1.0		1.0		1.5		1.4	
Couple 4 (FDH-FIW)	2	1	2	1	2	1	2	1	2.0	1.0
$\overline{X}$	1.5		1.5		1.5		1.5		1.5	
$\overline{X}$ for all couples	3.87		3.25		3.62		3.37		3.54	

Note: The possible range of score is from 1 to 7 where 1 signifies agreement and 7 signifies disagreement.

problem solving effectiveness was assessed and the couple results compared and ranked with respect to each of the four dimensions.

Solution Ability. The mean score in this category was 3.87 and the scores ranged from 1 to 7. For this category there was a marked discrepancy between the score of couples one and two, who were above the overall mean score, as compared to couples three and four, who scored below the mean score. The results indicate that the cognitive matched couples did not think that they had arrived at a suitable problem solution and the cognitive mismatched couples did.

Solution Satisfaction. The results for this category were similar to the previous category. Couples one and two both scored above the mean score of 3.6 and couples three and four scored below the mean. The range of scores was 1.5 to 6, which indicated that the cognitive matched couples were dissatisfied with their solution, whereas the cognitive mismatched couples were very satisfied.

Process Ability. The mean score for process ability was 3.25 with a range of 1 to 6. For this category, the cognitive mismatched couples again had similar scores below the mean, which indicates that they both felt that they worked well as couples during the problem solving discussion. Couple one was slightly moderate, although they did not feel that they worked well together. Couple two felt quite definite that they did not work well together. Again the cognitive mismatched couples were more satisfied than the cognitive matched couples.

Process Satisfaction. For process satisfaction the mean score was 3.37 with scores ranging from 1.5 to 6.0. Basically the distribution of scores for the four couples in this category was similar to that in process ability with the result that the cognitive mismatched couples were highly satisfied with the way they worked together. Couple one was moderately dissatisfied with the way they worked together and couple two was highly dissatisfied.

In summarizing the four categories, the results indicated that cognitive mismatched couples saw their problem solving effort as highly effective and satisfactory. They also felt that they worked well and enjoyed working together. Again it is couple four who rates high as on all other measures of satisfaction. Conversely couple two, as with other measures, was highly critical of their problem solving ability and accordingly was dissatisfied. They were also critical of and dissatisfied with their ability to work together. Couple one results indicated that, while they saw their problem solution efforts as highly ineffective and unsatisfactory, they were slightly more positive about their ability to work together and enjoy it. Again, this appears to reflect the inconsistency that is apparent throughout couple one's results.

General Analysis of Results

The findings of this study will be discussed in two parts. Of first consideration will be the application of the results to the various research questions. This will be followed by a comparative overview of the four couples in relation to the marital problem solving variables.

Regarding the first main question, the results indicated that the field independent matched couple perceived their marital cohesion at a low level whereas the other three couples perceived their cohesion at a moderately high level. The cohesion score for the matched field independent couple suggests that their perception of their marital cohesion was consistent with the field independent cognitive style characteristics. Similarly, given the interpersonal orientation of field dependent persons, the matched field dependent couple's moderately high score on cohesion was as might be expected. The contrast between these two matched cognitive styles in relation to cohesion appears to be more pronounced when their ideal cohesion scores are compared with their actual cohesion scores. The matched field dependent couple perceive their relationship to be at a satisfactory level of cohesion whereas the matched field independent couple do not. These results suggest that when couples are matched according to field dependent/independent cognitive styles there is a relationship between cognitive style match and couple perception of marital cohesion that is consistent with cognitive style characteristics.

The results pertaining to mismatched cognitive style couples in general indicated that both couples perceived their relationships as being moderately high in cohesion. Their perceived-ideal levels of cohesion were extremely high whereas the cognitive matched couples' perceived-ideal levels of cohesion were only moderately high. Of these two couples, couple four was the most satisfied with their level of cohesion.

In considering couple perception of marital adaptability, it was evident that the mismatched cognitive style couples perceived their relationship structures as more adaptive than did the matched couples.

This low perceived marital adaptability score for the matched field independent couple was consistent with their low perceived marital cohesion score. Since their ideal adaptability score placed them within the same high adaptability range as the other three couples, it is again apparent that they were dissatisfied with their level of adaptability. The matched field dependent couple in a similar manner perceived their adaptability at a low level and ideally wanted a high level of adaptability. Of the cognitive style mismatched couples, couple four indicated the greatest satisfaction with their level of marital adaptability.

In summary, the relationship between cognitive style and couple perception of marital structure was consistent with cognitive style characteristics for the couples matched according to cognitive style. That is, the matched field independent couple perceived their relationship structure as being low with respect to cohesion and adaptability and they were the most dissatisfied of the four couples with these marital structure levels. The matched field dependent couple perceived their relationship structure as being at a high level of cohesion and a low level of adaptability. They were the most satisfied of the couples with their marital cohesion but were dissatisfied with their marital adaptability. The mismatched cognitive style couples in general perceived their marital structures as functioning at high and satisfactory levels. This was particularly true of couple four (FDH-FIW). In comparison to the cognitive matched couples, the mismatched couples had higher perceived ideal levels of both marital adaptability and cohesion.

Results pertaining to the second main question suggest that couple cognitive style match and mismatch is related to problem solving interaction in the following ways. Couples who were mismatched according to cognitive style were quite different in a number of ways. Of the four couples, couple four (FDH-FIW) demonstrated the most interaction behaviours over all, whereas couple three (FIH-FDW) demonstrated the fewest. Considering specific interaction categories, couple four demonstrated more positive, validating, and facilitating behaviours than any of the other couples whereas couple three demonstrated the fewest behaviours in these categories in comparison with the other couples. A major difference between these two mismatched cognitive style couples is revealed in the results which indicated that a large percentage of couple four's interaction behaviours were of a supportive nature (48% agree and assent) whereas an even higher percentage of couple three's interaction behaviours were problem description behaviours (82%). Of the two cognitive mismatched couples, couple four were more socially oriented during this particular problem discussion session.

The matched cognitive style couples were similar with respect to results indicating the amount of negative communication behaviours. Of the four couples, the matched field dependent couple followed by the matched field independent couple demonstrated a greater frequency of negative behaviour codes than the mismatched cognitive style couples. With respect to positive interaction codes, the matched cognitive style couples demonstrated fewer behaviours than couple four and more behaviours than couple three. The matched cognitive style couples also revealed the greatest frequency of smile/laugh behaviours compared to the cognitive mismatched couples.

In reviewing the results pertaining to the relationship of cognitive style match and mismatch to distribution of interaction, the following findings are evident. The mismatched cognitive style couple three (FIH-FDW) demonstrated a unique pattern of communication structured around the wife's questionning behaviours. It is perhaps for this reason that the wife in couple three perceived herself as taking the initiative in a problem discussion situation. Couple one, in contrast, gave evidence to indicate that the husband took the initiative in the problem discussion and that the wife reacted to his initiative with both positive and negative behaviours. The remaining two couples both indicated a fairly equal distribution of interaction behaviours suggesting an equalitarian approach was likely utilized during this particular problem discussion session. Beyond these general assertions, little can be stated concerning cognitive style match and mismatch in relation to the distribution of interaction.

The relationship of couple cognitive match and mismatch to phasing of interaction was most evident when comparing the matched field dependent couple with the other three couples. This particular cognitive match did not appear to be as skilled at structuring and organizing their discussion into discernible phases as did the other couples. These results are consistent with field dependent characteristics which suggest that field dependent persons have difficulty organizing or structuring a diffuse or ambiguous situation. Aside from couple one, the other three couples all basically demonstrated a phasing of their problem solving interaction. The main observed differences among these three couples pertained to style of interaction phasing. The partners from the matched field independent couple each contributed to a structured problem discussion that progressed through discernible phases. The mismatched couples each indicated unique styles of phasing interaction that appeared to utilize each partner's cognitive skills. For example, the field dependent wife in couple three structured couple three's discussion with numerous questions. In other words she appealed to an external referent who in this case was her husband in order to structure this particular problem. In couple four's discussion it was the field independent wife who gave structure to the discussion with her problem descriptive comments and her periodic summing statements throughout the discussion. These results suggest that for a couple with a mismatched cognitive style there appears to be a blending of cognitive style characteristics that may be complimentary in a problem discussion context. The cognitive mismatched couple with the field independent wife was able to structure their problem discussion and maintain a level of relational support at the same time.

In relation to the third question, the results indicate that couple cognitive style match and mismatch relates to problem solving effectiveness and satisfaction in the following manner. Couples who were mismatched according to cognitive style perceived their problem solving ability as effective and satisfying whereas couples who were matched according to cognitive style did not. Consistent with field dependent/independent characteristics, the field independent couple was critical of their ability to problem solve and was not satisfied with the process. The field dependent couple, however, was critical of their ability to solve problems but slightly more satisfied with their problem solving process.

In general it would appear that the couples who are mismatched according to cognitive style functioned higher than the matched couples in relation to most of the variables pertaining to marital problem solving effectiveness. This was particularly evident for the couple with the field dependent husband and the field independent wife.

These then are the general assertions that are offered in response to the three major questions being considered in this study. An overview of the relevant information pertaining to the more specific aspects of the four couple types and the problem solving variables will conclude this chapter.

In discussing the problem solving variables, I wish to begin with the couples' perception of their problem solving ability. It seems that the perception each couple had of their own effectiveness was a fairly good gauge of how the couples ranked across the other variables as well. For example, couples four and three generally performed well and couples one and two appeared to have difficulties. A closer examination of each couple's results provides some tentative rationale for these differences.

Couple one (FDH-FDW) results seemed to indicate that they were cohesive enough and that they did not object to the process dimension of their problem solving discussion, but they were not adaptive enough nor were they effective at problem solving together. This apparent lack of ability was somewhat evident in the phasing of their interaction. Couple one had a very random approach to problem solving discussion and was unable to maintain a problem solving strategy long enough to reach a solution. As a result, they jumped from one problem area to another. Perhaps in this respect the fact that couple one had the greatest number of negative communication behaviours can be attributed to a frustration with their inability to make progress with their problem solving effort. Though this couple proposed change by initiating seven positive solutions, they appeared to be unable to harness the effort as evidenced by the fact that they could not agree on any of these solutions. Couple one seemed to be husband-led during the problem solving session. For example, he took the initiative in the area of problem description. The wife appeared to be the respondent as evidenced by her higher rates of blaming, complaining, and assenting behaviours.

The overall impression that couple one was satisfied with their cohesiveness yet dissatisfied with their adaptability and unable to effectively structure a problem solving interaction is consistent with what one might expect for a field dependent couple. While the relational bonding appears to be there, the structuring skills of the field independent apparently were not present in this problem solving situation. The only apparent discrepancy with the psychological differentiation theory would perhaps be the amount of negative interaction for couple one. While field dependent individuals tend to be less critical and openly hostile than field independent individuals, this was not the case here. There are two possible suggestions for this apparent discrepancy. First, this is a marital situation and perhaps in a familiar ongoing relationship field dependent persons become equally expressive of negative thoughts and feelings as field independent individuals. The other related suggestion is that the literature does suggest that wives in marital relationships do tend to be more expressive of negative thoughts and feelings than do husbands (Notarius & Johnson, 1982). Couple one's negative interaction pattern would appear to be consistent with the findings of these studies since more of the negative interaction was wife initiated.

Couple two's (FIH-FIW) results indicated in general that of the four couples they were the most critical of their problem solving effort and the most dissatisfied with their relationship cohesion and adaptability. The interaction results indicated that this couple got involved in the problem solving discussion. In fact, couple two had the second highest amount of interaction overall. Within this general category couple two gave evidence of a wide range of cognitive interaction behaviour. For instance, couple two demonstrated the interaction skill of paraphrase several times more than any of the other couples. Conversely, couple two was the only couple not to negative mind-read. During the problem solving discussion, couple two gave evidence of the ability to structure a discussion. In contrast to couple one, couple two's discussion was well focused and quite complex. With this general overview of couple two's results, it appears that they share some of the significant characteristics expected for field independent persons. For example, the evidence seems to show that this couple had fairly balanced interactional and problem structuring skills yet they were dissatisfied with their overall problem solving ability and seemed to have difficulty working and bonding together. Although they had good problem solving skills these skills were inefficient, as would be predicted by psychological differentiation theory. Accordingly marital problem solving effectiveness demands both structuring and social sensitivity.

Couple three (FIH-FDW) was quite successful in achieving results during the problem solving discussion and accordingly rated themselves as effective and satisfied problem solvers. What is significant to note about couple three is their interaction pattern, which was quite different from the other couples. Couple three appeared to have restricted interaction repertoire during problem discussion as was evidenced by the fact that 82% of their interaction was problem description. Characteristically, couple three was quite direct in their approach with the result that few positive or negative communication behaviours were exchanged compared to the other couples. The discussion itself was well focused with clearly discernible phases. Basically the discussion was wife-led as evidenced by the fact that she contributed more problem description and question behaviours. In fact, a general impression of this couple's approach was that the wife structured the problem discussion by asking questions to which her husband responded. When the discussion reached a particular point the wife would summarize and initiate a statement of implementation. This behaviour by the wife seems quite typical of a field dependent approach to problem solving. In this case, the field dependent wife appeared to rely almost exclusively upon the external referent, who in this case was her field independent husband. The field independent husband in this case was clearly cooperative but quite independent in forming his own opinions. He seldom asked his wife what she thought and she seldom told him what she thought, though she frequently inquired of his opinions. Given the moderate satisfaction this couple has with their marital cohesion, adaptability, and their perceived problem solving ability, it would seem that their particular style of problem solving works for them. While the evidence here is not conclusive, it does suggest that in this case a complementary cognitive style combination or mismatched husband field independent with wife field dependent has contributed more to a satisfactory marital problem solving style than has matched couple styles.

Couple four clearly distinguished themselves as the one couple out of the four who saw themselves as cohesive, adaptive, and effective at problem solving. They also had the greatest amount of interaction. They were the most supportive and the least negative. Generally speaking, couple four appeared to be a relationship maintenance oriented couple. The problem solving interaction, in fact, appeared to be weighted more towards relationship maintenance than issue resolution. This was quite evident, for example, when the field dependent husband repeated on three separate occasions during the discussion, "We don't have a problem with finances". One had the impression that had not the wife in this case facilitated the discussion, closure would have come quite early. The cognitive style differences between the field dependent husband and the field independent wife were quite evident during the problem discussion.

Though this couple saw themselves as quite equalitarian in leadership, the wife quite clearly structured the discussion in a facilitative way by clarifying, defining, and summarizing. Couple four appears to have found a style of relationship that works for them even better than couple three's. In this one problem solving instance, there was evidence to suggest that this couple has developed a style of marital interaction which utilizes their complementary cognitive styles.

CHAPTER VI

DISCUSSION

The results of this study indicate that there is reason to suggest that when individual psychological differentiation characteristics are combined in a marital relationship, they relate to how a couple functions during problem solving interaction. This relationship has been evident by some of the ways in which couples with four different cognitive style combinations have described their marital structure and performed on a problem solving task. A comparison of some of the results of this study with some of those indicated in Oltman and associates' (1975) study of psychological differentiation and non-marital dyad conflict resolution will highlight some of these relationships. For example, this study indicated that in relation to marital cohesion it was the matched field dependent couple who were the most satisfied with their perceived actual level of cohesion and the matched field independent couple who were the least satisfied with theirs. When Oltman and associates (1975) used a questionnaire to assess various aspects of interpersonal attraction immediately following a conflict resolution session, they found that interpersonal attraction was lowest for the matched field independent dyads and highest for the matched field dependent couples. The mean attraction ratings of the two mismatched dyadic groups were between the two matched group mean ratings. In both studies the interpersonal orientation of the field dependent person is suggested by the high cohesion and interpersonal attraction scores of the matched field dependent dyads. Conversely the individualistic orientation of the field independent person is suggested by the low cohesion and interpersonal attraction scores.

The characteristic desire for autonomy of the field independent person in relation to others was also manifest in relation to the marital adaptability scores. The matched field independent couple perceived themselves as being less adaptive than the other couples. In a conflict resolution situation, Oltman and associates (1975) found that their field independent matched dyads tended to stand firm with their original point of view and therefore reach agreement less frequently than other cognitive style combinations. Several results from this study would support this notion regarding field independent dyads. Consistent with the marital structure results, the matched field independent couple demonstrated the second highest amount of negative communications and were not satisfied with either their problem solution or their ability to solve or enjoy problem discussions. Both studies suggest that matched field independent couples are less adaptive and less able to come to agreement by accommodating to one another's point of view than are other combinations of field dependence/independence.

One finding which was quite different from what might be expected given the study by Oltman and associates (1975) was in relation to the matched field dependent couple and marital adaptability. Whereas the Oltman study indicated that matched field dependent dyads came to agreement more frequently than other combinations of cognitive dyads, this study did not. The matched field dependent couple perceived themselves to be low in marital adaptability and were the second most dissatisfied of the four couples with this aspect of their relationship. During the problem discussion session as well the matched field dependent couple performed in a nonadaptive manner. In general, the husband-led discussion was met with a mixed reaction from the wife who resisted more frequently than she accommodated to the husband's point of view. Contrary to what might be expected from field dependent persons, this couple demonstrated the most frequent number of negative behaviours of all four couples. Their self rating on their problem solving effectiveness was low; however, in a manner consistent with their perception of their marital cohesion, they did suggest that they enjoyed the problem discussion process. In view of these findings, a possible reason for the difference between Oltman's results and these might be that this study dealt with married couples and Oltman and associates studied stranger dyads. It is possible that in a marital relationship such as a matched field dependent couple in which the skill is lacking to identify the needs of partners and to structure the relationship to attend to these needs, the frustration level builds up until it is manifest in the interaction. This would be even more likely given the field dependent characteristic of turning toward another in an ambiguous situation. Perhaps in a marital relationship it becomes more difficult to accommodate to the other partner's point of view when one's own expectations have been disappointed over a period of time.

There were no studies with which to directly compare the results pertaining to the mismatched cognitive couples; however, it is interesting to note that these two couples were similar in that they perceived themselves to be effective marital problem solvers but dissimilar in the manner in which they conducted their problem discussion. Couple three (FIH-FDW) conducted their problem discussion in a very business-like manner with very few comments other than problem descriptive ones, whereas couple four (FDH-FIW) were very supportive and relational in the problem discussion. The influence of psychological differentiation on these couple styles of problem solving interaction is apparent. Couple three structured their problem discussion around the field dependent wife's questionning behaviours which constituted the majority of the problem descriptive behaviours. The field independent husband in this case served as the wife's external referent in removing the ambiguity from the problematic situation. Couple four (FDH-FIW) had a different style which was also consistent to a degree with psychological differentiation characteristics. This couple seemed to function during their problem discussion in a manner similar to that described in the studies of field dependence within a therapeutic relationship (Greene, 1972; Karp, Kissin, & Hustmeyer, 1970). These studies suggested that the therapists who were studied utilized a well defined and supportive therapeutic approach with their field dependent clients. In watching couple four during their discussion one could observe the field independent wife structuring a well phased and supportive problem structure for herself and for the field dependent husband. In fact, had it not been for her continued leadership, the discussion may have reached a premature closure since the husband repeatedly suggested that there really was no problem after all. These then are some of the ways in which the relationship between psychological differentiation and marital problem solving dynamics has been observed within this study.

It is interesting to note that the results from this study are similar in some respects to Sabatelli's (1983) study of cognitive style and marital quality. Sabatelli found that women in cognitive mismatched dyads had fewer marital complaints. Though this study did not measure marital complaints, the evidence did indicate that the couples from the cognitive style mismatched dyads were more satisfied with certain major aspects of their relationship. Furthermore, the wives from the two cognitive matched dyads indicated that they were not satisfied with some major marital issues. Sabatelli also found that husbands had fewer complaints when married to field independent wives. In this study the field dependent husband with the field independent wife appeared to be content with many aspects of the marital relationship. Dissimilar to Sabatelli's findings was the evidence to suggest that the field independent husband with the field independent wife did not appear to be satisfied with some aspects of his relationship. It appears from Sabatelli and the present study that the most conducive combination in terms of lack of complaints and other variables included here is field dependent husband and field independent wife. While none of these findings is conclusive, they are interesting from the point of view that they have been generated within the marital context which is a departure from the vast majority of field dependence/independence studies. In both cases the evidence would suggest that being in an ongoing marital relationship has an effect on how cognitive styles combine and function in a dyad. So far there seems to be a strong suggestion that, whereas non-permanent dyads prefer a cognitive match (Greene, 1972; Packer & Bain, 1978; Sousa-Poza & Rohrberg, 1976), this assertion cannot be generalized to the marital relationship. In fact, in the case of marital problem solving, having a representation of two different cognitive skill orientations within an ongoing relationship may prove to be an asset rather than a deterrent.

Because of the scope of this study and its exploratory nature, there were a number of methodological considerations. One of the main methodological considerations was the small number of participants utilized in the study. While the results of the study have generated some interesting assertions, the limited number of participants prevents the possibility of generalizing these results beyond the scope of this study. What the study has accomplished, however, is to indicate that psychological differentiation and marital problem solving is an area of study that needs to be delimited and studied again using a controlled study with a much larger sample.

Another important methodological consideration to be noted was certain of the characteristics of the study participants. Couple one, for example, was different from the group of participants in some important respects. Couple one was the only couple without a child. They were the only couple in which both the husband and the wife had university degrees. Furthermore, the husband in couple one did not produce a G.E.F.T. score that would suggest with confidence that he was field dependent. Ideally in another study a score that falls within the middle range should not be accepted. This participant's score was too close to the mean score of the sample and too far removed from the wife's score. In addition to the unique differences of couple one, couple four were the oldest of the four couples and had been married for the longest period of time. It is difficult to surmise the influence these couple differences may have had on the results obtained in the study. Certainly one would expect that these factors such as age, length of marriage and presence of children would have some bearing on the outcome of the study particularly in the cases of couples one and four. In spite of these methodological impurities, however, the four couple profiles in this study have indicated a number of ways in which psychological differentiation relates to marital problem solving dynamics.

Another major methodological issue pertains to the fact that many of the measures used in the study were self report and based on perception. Since field dependence/independence is a cognitive perceptual construct, it is reasonable to assume that to an extent the individual responses on these measures would be influenced by each person's particular cognitive perceptual orientation. A case in point in this study might be couple two, the field independent couple. The indications were that this couple saw themselves as dissatisfied with their level of cohesion and adaptability as well as their ability to problem solve effectively. There were also some indications, however, that this couple was as skilled if not more skilled in their approach to marital problem solving than the other three couples. The question remains that perhaps couple two was more dissatisfied because, with their field independent orientation, they were more discerning and critical of their performance as a couple. What was missing from this study in this respect was an objective appraisal of the couples' marital cohesion, adaptability, and problem solving effectiveness in addition to the couples' perception. While utilizing coded interaction as a component of the study provided some outside objectivity, this was perhaps not enough to satisfy the above concern.

A final issue can be raised with respect to the conceptual range of adaptability proposed by Olson and associates (1979). In their view, adaptability can be excessively high leading to chaos. In this study, two couples scored themselves in the chaotic range and yet gave little evidence in other components of the study that their relationship was chaotic. In addition it is interesting to note that all four couples ideally would have liked a "chaotic" level of adaptability. These results would raise some doubt as to whether a family can ever have too much adaptability or ability to respond flexibly to change. In this regard perhaps Doherty (1980) was correct in his assertion that Olson and associates (1979) have confounded "adaptability as an ability to change in response to stress, with adaptability as the change itself" (p. 13). If Olson's assertion about adaptability is correct, however, perhaps what this study has indicated is that couples in the early stage of marriage have a tendency to desire a more extreme level of marital adaptability than those in later stages.

CHAPTER VII

SUMMARY AND CONCLUSION

There seems to be a resurgence of interest in personality and marriage research by a number of disciplines within the social science field. Marriage and family researchers in particular have noted both the importance of individual member personality characteristics and also the difficulty of incorporating these individual personality characteristics within a study of the marriage or family group (Doherty, 1980; Klein, 1983). In an effort to better understand personality as an important factor contributing to marital problem solving dynamics, this study sought to examine the relationship between psychological differentiation and marital structure dynamics, marital problem solving interaction, and marital problem solving effectiveness. The major unit of analysis in the study was the marital unit. Since individual personality characteristics were being incorporated into an understanding of the marital unit, two levels of systems functioning were considered, the marital system and the individual psychological subsystems. In order to facilitate this kind of analysis, general systems theory was utilized as a theoretical framework capable of integrating psychological differentiation, an individual differences construct, and marital problem solving analysis.

Given the theoretical nature of this study and some of the inherent conceptual difficulties, it was designed to be exploratory in nature. As a result, in place of testable hypotheses a number of research questions were developed using the integrated theory of family problem solving effectiveness (Klein & Hill, 1979) as a framework. This framework has suggested that there are a number of determinants of marital and problem solving effectiveness including individual member characteristics and group structural properties. These two are considered to influence interactional dynamics which in turn influence problem solving effectiveness. The research questions that were considered dealt with the relationship between individual cognitive style characteristics within a marital relationship and various related problem solving dynamics including the following: (a) the structural dimensions of cohesion and adaptability; (b) the amount, distribution, and phasing of the interaction; and (c) perceived marital problem solving effectiveness.

In applying the results obtained to the research questions, it would appear that in all cases there is some evidence of a relationship between couple cognitive style characteristics and the various marital problem solving variables. In general it was found that couples who were mismatched according to cognitive style, especially the FDH-FIW couple, functioned better in relation to the problem solving variables considered. Since all four couples were quite different, particularly in their problem solving, and since many of these differences were quite consistent with what might be expected given each couple's cognitive structure combination, one is tempted to conclude that these major differences are linked to differences in cognitive style. In other words, the results indicate that psychological differentiation, as measured by field dependence/independence, plays a mediating role in marital problem solving style in particular.

While the results of this study have shown some promise, there is a need to examine the relationship between these variables experimentally. Of special consideration should be the major stylistic differences which are apparent during problem solving as a result of cognitive style orientations operating within the marriage. While this study has suggested that with only four couples there were some stylistic differences, these results now need to be examined with a much larger sample.

Should further studies suggest more conclusively that cognitive style differences or similarities within a marital relationship have a stylized moderating effect on the way a couple functions in solving problems together, this kind of information could be an asset in helping couples to become better marital problem solvers. For example, problem solving skill training could be suited to specific couple needs in this area if the individuals were assessed first for psychological differentiation and related cognitive skills. From this perspective, couples could then be taught how to utilize one another's strengths or how to develop skills that are not as well developed. Similarly with respect to marital counselling, psychological differentiation theory could be a useful framework from which to work in assessing marital partner cognitive styles and problem solving assets and deficiencies. Presumably those who are field dependent would need help in becoming more discriminating of contextual cues in order to more effectively articulate marital problem areas in order to structure solution goals. On the other hand, those who are field independent perhaps would need help in becoming aware of the effects of their cognitive orientation on such important marital variables as cohesion and adaptability.

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APPENDIX A

Raw Code Frequency Tables

Couple One (FDH-FDW)

```
------- MICS III ------ COUPLE:ML841001 SESSION  1 ---------- Page  3
   PRE INTERVENTION DATA - SESSION LABEL:________________________

-------------------- RAW CODE FREQUENCIES ----------------------------

                FREQUENCY          RATE/MINUTE          PERCENTAGE
              HUSBAND  WIFE      HUSBAND  WIFE        HUSBAND  WIFE
     MODIFR---------------------------------------------------------
          IF     1      8          .10     .80           1      11
          QU    16     20         1.60    2.00          21      27
          CM     1      0          .10    0.00           1       0
          CF     0      0         0.00    0.00           0       0
          NF     0      1         0.00     .10           0       1
     NVAFFC---------------------------------------------------------
          PN     0      0         0.00    0.00           0       0
          SN     4      5          .40     .50           5       7
          AN     0      0         0.00    0.00           0       0
          NN     0      0         0.00    0.00           0       0
          TN     0      0         0.00    0.00           0       0
BEHAVIOR CODE CATEGORIES:
     IRRELV---------------------------------------------------------
          NO     0      1         0.00     .10           0       1
          TA     4      1          .40     .10           5       1
     DSCRPT---------------------------------------------------------
          PE     1      0          .10    0.00           1       0
          PI    46     37         4.60    3.70          61      49
     BLAME ---------------------------------------------------------
          CP     1      2          .10     .20           1       3
          CR     0      1         0.00     .10           0       1
          M-     2      0          .20    0.00           3       0
          PU     0      1         0.00     .10           0       1
     PROPCH---------------------------------------------------------
          PS     4      3          .40     .30           5       4
          CS     0      0         0.00    0.00           0       0
          NS     0      1         0.00     .10           0       1
     VALDTN---------------------------------------------------------
          AG     3      1          .30     .10           4       1
          AP     2      0          .20    0.00           3       0
          AR     0      0         0.00    0.00           0       0
          CO     0      0         0.00    0.00           0       0
     INVALN---------------------------------------------------------
          DG     1      3          .10     .30           1       4
          DR     0      0         0.00    0.00           0       0
          EX     0      0         0.00    0.00           0       0
          IN     2      4          .20     .40           3       5
          NR     0      1         0.00     .10           0       1
          NC     0      0         0.00    0.00           0       0
          TO     0      0         0.00    0.00           0       0
     FACLTN---------------------------------------------------------
          PR     1      0          .10    0.00           1       0
          M+     1      0          .10    0.00           1       0
          HM     0      2         0.00     .20           0       3
          PP     0      0         0.00    0.00           0       0
          SL     7      8          .70     .80           9      11
          AS     1      9          .10     .90           1      12
----------------------------------------------------------------------
```

Couple Two (FIH-FIW)

```
------ MICS III ------ COUPLE:ML841002 SESSION   1 ----------→ Page   3
   PRE INTERVENTION DATA - SESSION LABEL:_________________________

--------------------- RAW CODE FREQUENCIES ----------------------------

                    FREQUENCY          RATE/MINUTE          PERCENTAGE
                 HUSBAND  WIFE       HUSBAND  WIFE       HUSBAND  WIFE
        MODIFR---------------------------------------------------------
            IF      7      7           .70     .70           9      9
            QU     16     20          1.60    2.00          20     25
            CM      0      0          0.00    0.00           0      0
            CF      0      0          0.00    0.00           0      0
            NF      0      0          0.00    0.00           0      0
        NVAFFC---------------------------------------------------------
            PN      0      0          0.00    0.00           0      0
            SN      7     11           .70    1.10           9     14
            AN      1      0           .10    0.00           1      0
            NN      6      6           .60     .60           8      8
            TN      0      0          0.00    0.00           0      0
   BEHAVIOR CODE CATEGORIES:
        IRRELV---------------------------------------------------------
            NO      1      0           .10    0.00           1      0
            TA      1      2           .10     .20           1      3
        DSCRPT---------------------------------------------------------
            PE      3      1           .30     .10           4      1
            PI     41     52          4.10    5.20          52     66
        BLAME ---------------------------------------------------------
            CP      0      0          0.00    0.00           0      0
            CR      5      1           .50     .10           6      1
            M-      0      0          0.00    0.00           0      0
            PU      0      0          0.00    0.00           0      0
        PROPCH---------------------------------------------------------
            PS      2      2           .20     .20           3      3
            CS      0      0          0.00    0.00           0      0
            NS      0      0          0.00    0.00           0      0
        VALDTN---------------------------------------------------------
            AG      7      6           .70     .60           9      8
            AP      0      0          0.00    0.00           0      0
            AR      0      0          0.00    0.00           0      0
            CO      0      0          0.00    0.00           0      0
        INVALN---------------------------------------------------------
            DG      3      3           .30     .30           4      4
            DR      0      0          0.00    0.00           0      0
            EX      0      0          0.00    0.00           0      0
            IN      0      0          0.00    0.00           0      0
            NR      0      0          0.00    0.00           0      0
            NC      0      0          0.00    0.00           0      0
            TO      0      0          0.00    0.00           0      0
        FACLTN---------------------------------------------------------
            PR      6      3           .60     .30           8      4
            M+      0      0          0.00    0.00           0      0
            HM      1      2           .10     .20           1      3
            PP      0      0          0.00    0.00           0      0
            SL      5      4           .50     .40           6      5
            AS      4      3           .40     .30           5      4
-----------------------------------------------------------------------
```

Couple Three (FIH-FDW)

```
------ MICS III ----- COUPLE:ML841004 SESSION   1 ----------- Page   3
    PRE INTERVENTION DATA - SESSION LABEL:___________________________
---------------------- RAW CODE FREQUENCIES ---------------------------

                  FREQUENCY           RATE/MINUTE         PERCENTAGE
               HUSBAND  WIFE        HUSBAND  WIFE       HUSBAND  WIFE
       MODIFR-----------------------------------------------------------
           IF      2     12           .20    1.20          4      21
           QU      2     25           .20    2.50          4      45
           CM      1      0           .10    0.00          2       0
           CF      0      0          0.00    0.00          0       0
           NF      0      0          0.00    0.00          0       0
       NVAFFC-----------------------------------------------------------
           PN      0      0          0.00    0.00          0       0
           SN      2      1           .20     .10          4       2
           AN      1      0           .10    0.00          2       0
           NN      1      4           .10     .40          2       7
           TN      0      0          0.00    0.00          0       0
  BEHAVIOR CODE CATEGORIES:
       IRRELV-----------------------------------------------------------
           NO      0      2          0.00     .20          0       4
           TA      0      0          0.00    0.00          0       0
       DSCRPT-----------------------------------------------------------
           PE      6     11           .60    1.10         12      20
           PI     31     39          3.10    3.90         63      70
       BLAME -----------------------------------------------------------
           CP      0      0          0.00    0.00          0       0
           CR      0      0          0.00    0.00          0       0
           M-      1      1           .10     .10          2       2
           PU      0      0          0.00    0.00          0       0
       PROPCH-----------------------------------------------------------
           PS      0      0          0.00    0.00          0       0
           CS      0      0          0.00    0.00          0       0
           NS      0      0          0.00    0.00          0       0
       VALDTN-----------------------------------------------------------
           AG      4      0           .40    0.00          8       0
           AP      0      0          0.00    0.00          0       0
           AR      0      0          0.00    0.00          0       0
           CO      0      1          0.00     .10          0       2
       INVALN-----------------------------------------------------------
           DG      0      0          0.00    0.00          0       0
           DR      0      0          0.00    0.00          0       0
           EX      0      0          0.00    0.00          0       0
           IN      0      0          0.00    0.00          0       0
           NR      0      0          0.00    0.00          0       0
           NC      0      0          0.00    0.00          0       0
           TO      0      0          0.00    0.00          0       0
       FACLTN-----------------------------------------------------------
           PR      0      0          0.00    0.00          0       0
           M+      0      0          0.00    0.00          0       0
           HM      0      0          0.00    0.00          0       0
           PP      0      0          0.00    0.00          0       0
           SL      2      1           .20     .10          4       2
           AS      5      1           .50     .10         10       2
-----------------------------------------------------------------------

   GRAND TOTALS   [illegible] [illegible]   [illegible] [illegible]   100 100
```

Couple Four (FDH-FIW)

```
------ MICS III ----- COUPLE:ML841003 SESSION   1 ------------ Page   3
     PRE INTERVENTION DATA - SESSION LABEL:____________Cp 4______________
-------------------- RAW CODE FREQUENCIES ----------------------------

                        FREQUENCY            RATE/MINUTE           PERCENTAGE
                      HUSBAND  WIFE        HUSBAND  WIFE         HUSBAND  WIFE
              MODIFR-----------------------------------------------------------
                  IF     21     14           2.10    1.40            24     16
                  QU      5      7            .50     .70             6      8
                  CM      0      0           0.00    0.00             0      0
                  CF      0      0           0.00    0.00             0      0
                  NF      0      0           0.00    0.00             0      0
              NVAFFC-----------------------------------------------------------
                  PN      0      0           0.00    0.00             0      0
                  SN      1      4            .10     .40             1      4
                  AN      0      0           0.00    0.00             0      0
                  NN      0      0           0.00    0.00             0      0
                  TN      0      0           0.00    0.00             0      0
        BEHAVIOR CODE CATEGORIES:
              IRRELV-----------------------------------------------------------
                  NO      0      0           0.00    0.00             0      0
                  TA      6      6            .60     .60             7      7
              DSCRPT-----------------------------------------------------------
                  PE      0      0           0.00    0.00             0      0
                  PI     33     36           3.30    3.60            38     40
              BLAME -----------------------------------------------------------
                  CP      0      0           0.00    0.00             0      0
                  CR      0      0           0.00    0.00             0      0
                  M-      2      0            .20    0.00             2      0
                  PU      0      0           0.00    0.00             0      0
              PROPCH-----------------------------------------------------------
                  PS      3      4            .30     .40             3      4
                  CS      0      0           0.00    0.00             0      0
                  NS      0      0           0.00    0.00             0      0
              VALDTN-----------------------------------------------------------
                  AG     16     18           1.60    1.80            18     20
                  AP      5      1            .50     .10             6      1
                  AR      0      0           0.00    0.00             0      0
                  CO      0      0           0.00    0.00             0      0
              INVALN-----------------------------------------------------------
                  DG      0      1           0.00     .10             0      1
                  DR      0      0           0.00    0.00             0      0
                  EX      0      0           0.00    0.00             0      0
                  IN      0      0           0.00    0.00             0      0
                  NR      0      0           0.00    0.00             0      0
                  NC      0      0           0.00    0.00             0      0
                  TO      0      0           0.00    0.00             0      0
              FACLTN-----------------------------------------------------------
                  PR      1      1            .10     .10             1      1
                  M+      0      0           0.00    0.00             0      0
                  HM      1      1            .10     .10             1      1
                  PP      0      0           0.00    0.00             0      0
                  SL      3      1            .30     .10             3      1
                  AS     17     21           1.70    2.10            20     23
---------------------------------------------------------------------------------
```

APPENDIX B

Category Frequency Distribution Histograms

```
                                   Couple One (FDH-FDW)
------- MICS III ------ COUPLE:[illegible] SESSION   1 ----------- Page  5
   PRE INTERVENTION DATA - SESSION LABEL:_________________________

              CATEGORY FREQUENCY DISTRIBUTION HISTOGRAMS


                                  HUSBAND

           12. |           |           |           |           |           |           |           |
           11. |           |           |           |           |           |           |           |
           10. |           |           |           |           |           |           |           |
            9. |           |           |           |           |           |           |           |
            8. |           |         D |           |           |           |           |           |
            7. |           |        DD |           |           |           |           |           |
            6. |           | D   D DDD |           |           |           |           |           |
            5. |           | D   D DDD |           |           |           |           |           |
            4. |           | DD  D DDD |           |           |           |           |           |
            3. |           | DDD D DDDD|           |           |           |           |           |
            2. |           | DDDDDDDDDD|         B |         C |           |           |  F    F  |
            1. | X   XX X  | DDDDDDDDDD| B       B |    C CC   | VV V  V V | I I    I  | F FFF FFFF|
               | ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++|
   CATEGORY:       IRRELV      DSCRPT      BLAME       PROPCH      VALDTN      INVALN      FACLTN
---------------------------------------------------------------------------------------------------
CATEGORY TOTALS:       4          47           3           4           5           3          10
RATE PER MINUTE:     .40        4.70         .30         .40         .50         .30        1.00
    PERCENTAGE:        5          62           4           5           7           4          13
---------------------------------------------------------------------------------------------------

                                    WIFE

           12. |           |           |           |           |           |           |           |
           11. |           |           |           |           |           |           |           |
           10. |           |           |           |           |           |           |           |
            9. |           |           |           |           |           |           |           |
            8. |           |           |           |           |           |           |           |
            7. |           |      D D  |           |           |           |           |           |
            6. |           |      D D  |           |           |           |           |           |
            5. |           | D   D DD D|           |           |           |           |        FF |
            4. |           | DD  D DD D|           |           |           |           |     F FF  |
            3. |           | DD DD DD D|           |           |           |           |  F  FFFFF |
            2. |           | DD DD DD D|           |         C |           |   I   I   |  F  FFFFF |
            1. |        XX | DDDDD DD D|  BB  BB   |      C CC | V         | I III  II | FF F FFFFF|
               | ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++|
   CATEGORY:       IRRELV      DSCRPT      BLAME       PROPCH      VALDTN      INVALN      FACLTN
---------------------------------------------------------------------------------------------------
CATEGORY TOTALS:       2          37           4           4           1           8          19
RATE PER MINUTE:     .20        3.70         .40         .40         .10         .80        1.90
    PERCENTAGE:        3          49           5           5           1          11          25
---------------------------------------------------------------------------------------------------

                      LENGTH OF SESSION: 10.0 MINUTES
                      Histogram displayed for 10 minutes
```

```
------ MICS III ------ COUPLE:ML841002 SESSION   1 ------------ Page   5
      PRE INTERVENTION DATA - SESSION LABEL:_____________________________
                                    Couple Two (FIH-FIW)

                  CATEGORY FREQUENCY DISTRIBUTION HISTOGRAMS


                                   HUSBAND

             12. !           !           !           !           !           !           !           !
             11. !           !           !           !           !           !           !           !
             10. !           !           !           !           !           !           !           !
              9. !           !           !           !           !           !           !           !
              8. !           !           !           !           !           !           !           !
              7. !           !           !           !           !           !           !           !
              6. !           ! DD        !           !           !           !           !           !
              5. !           ! DDD  D D  !           !           !           !           ! F  F      !
              4. !           ! DDD  DDDDD!           !           !           !           ! F  FF     !
              3. !           ! DDD DDDDDD!          B!           !  V        !           ! F  FF     !
              2. !           ! DDDDDDDDDD!          B!           !  V        !           ! F  FF     !
              1. !  X   X    ! DDDDDDDDDD!  B   B   B!    C    C ! V VVVV    !     I II  ! F FFF  FF !
                 ! +++++++++++ ++++++++++ ! ++++++++++ ! ++++++++++ ! ++++++++++ ! ++++++++++ ! ++++++++++ !
       CATEGORY:    IRRELV      DSCRPT       BLAME      PROPCH      VALDTN      INVALN      FACLTN
-----------------------------------------------------------------------------------------------
CATEGORY TOTALS:        2          44           5          2           7           3          16
RATE PER MINUTE:      .20        4.40         .50        .20         .70         .30        1.60
     PERCENTAGE:        3          56           6          3           9           4          20
-----------------------------------------------------------------------------------------------

                                     WIFE

             12. !           !           !           !           !           !           !           !
             11. !           !           !           !           !           !           !           !
             10. !           !           !           !           !           !           !           !
              9. !           !           !           !           !           !           !           !
              8. !           !           !           !           !           !           !           !
              7. !           !           !           !           !           !           !           !
              6. !           ! DDD D    DD!          !           !           !           !           !
              5. !           ! DDDDD    DD!          !           !           !           !           !
              4. !           ! DDDDDDDDDD!           !           !           !           !           !
              3. !           ! DDDDDDDDDD!           !           !           !           ! F         !
              2. !           ! DDDDDDDDDD!           !           !          V!           ! FFFF      !
              1. !  . XX     ! DDDDDDDDDD!          B!    C    C ! VV    V VV!     I II  ! FFFF  FF F!
                 ! +++++++++++ ++++++++++ ! ++++++++++ ! ++++++++++ ! ++++++++++ ! ++++++++++ ! ++++++++++ !
       CATEGORY:    IRRELV      DSCRPT       BLAME      PROPCH      VALDTN      INVALN      FACLTN
-----------------------------------------------------------------------------------------------
CATEGORY TOTALS:        2          53           1          2           6           3          12
RATE PER MINUTE:      .20        5.30         .10        .20         .60         .30        1.20
     PERCENTAGE:        3          67           1          3           8           4          15
-----------------------------------------------------------------------------------------------

                        LENGTH OF SESSION: 10.0 MINUTES
                        Histogram displayed for 10 minutes
```

Couple Three (FIH-FDW)

```
------- MICS III ----- COUPLE:ML841004 SESSION   1 ----------- Page   5
    PRE INTERVENTION DATA - SESSION LABEL:_________________________

          CATEGORY FREQUENCY DISTRIBUTION HISTOGRAMS


                               HUSBAND

          12. |           |           |           |           |           |           |           |
          11. |           |           |           |           |           |           |           |
          10. |           |           |           |           |           |           |           |
           9. |           |           |           |           |           |           |           |
           8. |           |           |           |           |           |           |           |
           7. |           |           |           |           |           |           |           |
           6. |           |   DD      |           |           |           |           |           |
           5. |           |   DD      |           |           |           |           |           |
           4. |           | DDDD      |           |           |           |           |           |
           3. |           | DDDDD DDDD|           |           |           |           | F        F|
           2. |           | DDDDDDDDDD|           |           |           |           | F        F|
           1. |           | DDDDDDDDDD|         B |           | VV  V    V|           | F    F   F|
              | ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++|
     CATEGORY:    IRRELV      DSCRPT      BLAME       PROPCH      VALDTN      INVALN      FACLTN
------------------------------------------------------------------------------------------------
CATEGORY TOTALS:       0          37          1           0           4           0           7
RATE PER MINUTE:    0.00        3.70        .10        0.00         .40        0.00         .70
     PERCENTAGE:       0          76          2           0           8           0          14
------------------------------------------------------------------------------------------------

                                 WIFE

          12. |           |           |           |           |           |           |           |
          11. |           |           |           |           |           |           |           |
          10. |           |           |           |           |           |           |           |
           9. |           | D         |           |           |           |           |           |
           8. |           | D         |           |           |           |           |           |
           7. |           | D  DD     |           |           |           |           |           |
           6. |           | D DDD    D|           |           |           |           |           |
           5. |           | D DDD    D|           |           |           |           |           |
           4. |           | DDDDD D DD|           |           |           |           |           |
           3. |           | DDDDDDD DD|           |           |           |           |           |
           2. |           | DDDDDDD DD|           |           |           |           |           |
           1. |        XX | DDDDDDD DD| B         |           |     V     |           |  F     F  |
              | ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++| ++++++++++|
     CATEGORY:    IRRELV      DSCRPT      BLAME       PROPCH      VALDTN      INVALN      FACLTN
------------------------------------------------------------------------------------------------
CATEGORY TOTALS:       2          50          1           0           1           0           2
RATE PER MINUTE:     .20        5.00        .10        0.00         .10        0.00         .20
     PERCENTAGE:       4          89          2           0           2           0           4
------------------------------------------------------------------------------------------------

                    LENGTH OF SESSION: 10.0 MINUTES
                    Histogram displayed for 10 minutes
```

Couple Four (FDH-FIW)

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------ MICS III ----- COUPLE:ML841003 SESSION   1 ------------ Page   5
   PRE INTERVENTION DATA - SESSION LABEL:___________________________

          CATEGORY FREQUENCY DISTRIBUTION HISTOGRAMS


                                  HUSBAND

           12. |            |            |            |            |            |            |            |
           11. |            |            |            |            |            |            |            |
           10. |            |            |            |            |            |            |            |
            9. |            |            |            |            |            |            |            |
            8. |            |            |            |            |            |            |            |
            7. |            |          D |            |            |            |            |            |
            6. |            |     D    D |            |            |            |            |            |
            5. |            |     D    D |            |            |            |            |            |
            4. |            | D D D    D |            |            |    V       |            |  F         |
            3. |            | DDDDD    D |            |            |    V V     |            |  F FFFF    |
            2. |  X    X    | DDDDDD  DD |            |            |  VVVVVVVV  |            | FF FFFFF   |
            1. | XXX   X    | DDDDDDDDDD | B    B     |  C     C C | VVVVVVVVVV |            | FFFFFFFFF  |
               | ++++++++++ | ++++++++++ | ++++++++++ | ++++++++++ | ++++++++++ | ++++++++++ | ++++++++++ |
     CATEGORY:     IRRELV       DSCRPT       BLAME        PROPCH       VALDTN       INVALN       FACLTN
------------------------------------------------------------------------------------------------------
CATEGORY TOTALS:      6           13            2            3           21            0           22
RATE PER MINUTE:    .60         3.30          .20          .30         2.10         0.00         2.20
     PERCENTAGE:      7           38            2            3           24            0           25
------------------------------------------------------------------------------------------------------

                                    WIFE

           12. |            |            |            |            |            |            |            |
           11. |            |            |            |            |            |            |            |
           10. |            |            |            |            |            |            |            |
            9. |            |            |            |            |            |            |            |
            8. |            |            |            |            |            |            |            |
            7. |            | D       D  |            |            |            |            |            |
            6. |            | D       D  |            |            |            |            |            |
            5. |            | D       D  |            |            |            |            |            |
            4. |            | D   D   D  |            |            |  V         |            |    F F     |
            3. |            | D DDDD  DD |            |  C         |  V V   VV  |            |   FF FF F  |
            2. |     X      | DDDDDDDDDD |            |  C         |  VVV   VV  |            |   FFFFFFFF |
            1. | XX  XX   X | DDDDDDDDDD |            |  C C       |  VVVVVVVVV |      I     | F FFFFFFFF |
               | ++++++++++ | ++++++++++ | ++++++++++ | ++++++++++ | ++++++++++ | ++++++++++ | ++++++++++ |
     CATEGORY:     IRRELV       DSCRPT       BLAME        PROPCH       VALDTN       INVALN       FACLTN
------------------------------------------------------------------------------------------------------
CATEGORY TOTALS:      6           36            0            4           19            1           24
RATE PER MINUTE:    .60         3.60         0.00          .40         1.90          .10         2.40
     PERCENTAGE:      7           40            0            4           21            1           27
------------------------------------------------------------------------------------------------------

                     LENGTH OF SESSION: 10.0 MINUTES
                    Histogram displayed for 10 minutes
```

APPENDIX C

Marital Problem Solving Effectiveness Questionnaire

APPENDIX C

Marital Problem Solving Effectiveness Questionnaire

For each of the statements printed below, please circle the number on the seven point scale that best indicates your response.

1. In the problem discussed today, how would you rate yourself in the following areas.

(a) I would say that we arrived at a suitable solution.

strongly agree	1	2	3	4	5	6	7	strongly disagree

(b) I would say that we worked well together.

strongly agree	1	2	3	4	5	6	7	strongly disagree

(c) I am satisfied with the solution we came up with.

strongly agree	1	2	3	4	5	6	7	strongly disagree

(d) I am satisfied with the way we worked together.

strongly agree	1	2	3	4	5	6	7	strongly disagree

2. Our problem solving effort today was similar to the way we usually discuss problems together.

Yes it was similar	1	2	3	4	5	6	7	No it was not similar

3. In your relationship, who initiates problem solving discussions?

				both				
wife mostly	1	2	3	4	5	6	7	husband mostly

4. When disagreements arise, they usually result in

				mutual				
wife giving in	1	2	3	4	5	6	7	husband giving in
				give and take				

5. Would you say that you and your partner have similar or different styles when discussing marital problems?

				both				
very similar	1	2	3	4	5	6	7	very dissimilar

6. In general, how would you rate yourself and your marriage partner on joint problem solving ability?

				neutral				
extremely good	1	2	3	4	5	6	7	extremely poor

7. In general, how satisfied are you with your joint problem solving efforts?

				neutral				
very satisfied	1	2	3	4	5	6	7	very dissatisfied

APPENDIX D

Problem Solving Discussion Instructions

APPENDIX D

Problem Solving Discussion Instructions

Most couples have disagreements from time to time in their marriage relationships. In a moment I'm going to hand each of you a list of four possible areas of disagreement in your marriage. These areas have been identified by you in your response to the Dyadic Adjustment Scale which you filled out for me earlier. Please look over the list and give some thought to these areas of possible disagreement as they relate to your marriage. Do not discuss them until I give you further instructions.

(One minute pause)

When I tell you to begin, you will have 15 minutes without interruption to discuss an area of disagreement in your marriage situation. In the 15 minute time period alloted to you, I would like you to do two things:

(1) First I would like you to decide together what you think is the problem that represents the area of greatest disagreement in your marriage right now.

(2) Second, when you have decided on a problem I would like you to discuss specific ideas about the problem that might lead to one or more solutions that you think might help resolve the disagreement.

For example, suppose for Couple A the area of greatest disagreement is family finances. The specific problem right now is that the couple can't decide on whether or not to make a major financial expenditure for a special vacation trip this summer. Husband feels he has worked hard all year and is looking for a rewarding trip to the Bahamas. Wife sees a trip such as this as being impractical at this time. Husband sees wife as being too practical with finances and wife sees husband as being too frivolous and not concerned enough about practical concerns.

Once again then your task is (1) to pick an area of current disagreement and isolate a specific problem around which that disagreement centers and (2) to solve that problem as much as possible in a 15 minute time period.

Questions?

Begin.

APPENDIX E

Informed Consent

APPENDIX E

Informed Consent

The purpose of this study is to examine how certain personality characteristics of marital partners relate to the way in which they work together to solve marriage problems. As participants in the study, you will be involved in a variety of assessment procedures that will involve input from both you and your marital partner. Methods of gathering information from participants will include individually done measures of intelligence, cognitive style, and perception of certain aspects of marriage. In addition, a brief video tape will be made of couple interaction. All aspects of this study will be treated in a highly confidential manner. Should you and your partner agree to participate in this study, you will be required to meet with the researcher on four separate occasions within a two week period of time. In total the study will require no more than six hours of your time. You may, if you wish, withdraw from the study at any time. Should you have any questions about the study, I will be happy to provide answers; however, I would prefer to refrain from making many comments about the study until it has been completed. Though I will not be at liberty to give you a copy of your measurement scores, when the study is completed I will make myself available to discuss in general any questions you might have about the study.

Signature of Subject ________________

Date ________________

APPENDIX F

Video Taping Consent Form

APPENDIX E

Video Taping Consent Form

I, ______________________________ , am presently involved in Landor Liddell's thesis project. As a part of this study, I am giving my permission to participate in a video taping session. I understand that these recordings will be observed only by Landor and two professional coders from the University of Oregon, Marital Studies Program. Upon completion of the coding of the tapes, all of the tapes will be erased.

NAME

DATE